


# The Encyclopedia of Positive Psychology

Edited by Shane J. Lopez



VOLUME I | A-M

 WILEY-BLACKWELL

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*Ruut Veenhoven, Erasmus University Rotterdam*

# **The Encyclopedia of Positive Psychology**

Edited by **Shane J. Lopez**, The Clifton Strengths Institute and Gallup

Managing Editors

**Naif A-Mutawa**, Kuwait University

**Anne S. Beauchamp**, University of Kansas

**Lisa M. Edwards**, Marquette University

**Amy C. Fineburg**, Spain Park High School /The University of Alabama

**P. Alex Linley**, Centre for Applied Positive Psychology, UK

**Tom Rath**, Gallup

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*Edited by*  
Shane J. Lopez

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*Editorial Offices*

350 Main Street, Malden, MA 02148-5020, USA

9600 Garsington Road, Oxford, OX4 2DQ, UK

The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

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## List of Contributors

**Heather Abercrombie**, University of Wisconsin

**Candice A. Ackerman**, University of Kansas

**Glenn Adams**, University of Kansas

**Sara Algoe**, University of North Carolina, Chapel Hill

**Naif Al-Mutawa**, Faculty of Medicine, Kuwait University

**Joshua Aronson**, New York University

**Raksha Arora**, Gallup

**Jim Asplund**, Gallup

**Jennifer Austenfeld**, University of Kansas

**James R. Averill**, University of Massachusetts, Amherst

**Susan H. Backhouse**, Leeds Metropolitan University

**Steven F. Bacon**, California State University, Bakersfield

**Brittany N. Barber**, Marquette University

**Jack J. Bauer**, University of Dayton

**Anne S. Beauchamp**, University of Kansas

**Sherry L. Beaumont**, University of Northern British Columbia

**Eric R. Benson**, University of Kansas

**Insoo Kim Berg**, Brief Family Therapy Center

**Rezarta Bilali**, University of Massachusetts

**Robert Biswas-Diener**, Center for Applied Positive Psychology

**Jeremy A. Blumenthal**, Syracuse University

**Martin Bolt**, Calvin College

**Ilona Boniwell**, University of East London

**Marc A. Brackett**, Yale University

**Irma F. Brasseur**, University of Kansas

**Megan E. Brent**, University of Kansas

**Sara K. Bridges**, University of Memphis

**Thomas W. Britt**, Clemson University

**Fred B. Bryant**, Loyola University Chicago

**Matt Buckman**, University of Kentucky

**Belinda Campos**, University of California – Irvine

**Edward R. Canda**, University of Kansas

**Melanie Canterberry**, University of Kansas

**C. Sue Carter**, University of Illinois at Chicago

**Dominic Carter**, Centre for Applied Positive Psychology

**Charles S. Carver**, University of Miami

**Richard F. Catalano**, University of Washington

**Jennifer S. Cheavens**, Ohio State University

**Juliette Christie**, University of Georgia

**Michael A. Cohn**, University of Michigan, Ann Arbor  
**Brian P. Cole**, University of Kansas  
**Paul T. Costa**, National Institute on Aging, National Institute of Health  
**Alia Crum**, Yale University  
**James P. Curley**, Columbia University  
**J. J. Cutuli**, Institute of Child Development, University of Minnesota  
**Mihaly Csikszentmihalyi**, Claremont Graduate University  
**Mary C. Davis**, Arizona State University  
**David V. Day**, Singapore Management University  
**Edward L. Deci**, University of Rochester  
**Adam H. DeHoek**, Loyola University Chicago  
**Kathryn Dekas**, University of Michigan  
**Donald D. Deshler**, University of Kansas  
**Sally S. Dickerson**, University of California – Irvine  
**Ed Diener**, University of Illinois  
**Ana C. DiRago**, University of Minnesota – Twin Cities  
**Shannon E. Dowd-Eagle**, Rhode Island College  
**Laura E. Dreer**, University of Alabama at Birmingham  
**Jane E. Dutton**, University of Michigan  
**John W. Eagle**, Rhode Island College  
**Christopher A. Ebberwein**, Psychology Consultants, Wichita, Kansas  
**Lisa M. Edwards**, Marquette University  
**Timothy R. Elliott**, Texas A&M University

**Robert Emmons**, University of California, Davis  
**Matt Englar-Carlson**, California State University, Fullerton  
**Carrie L. Ericksen**, Loyola University Chicago  
**Richard I. Evans**, University of Houston  
**Giovanni A. Fava**, University of Bologna, Italy  
**David B. Feldman**, Santa Clara University  
**Frank D. Fincham**, Florida State University  
**Amy C. Fineburg**, Spain Park High School/The University of Alabama  
**Lisa Y. Flores**, University of Missouri  
**Susan Folkman**, University of California, San Francisco  
**Blaine J. Fowers**, University of Miami  
**Barbara L. Fredrickson**, University of North Carolina at Chapel Hill  
**Dieter Frey Ludwig**, Maximilians University Munich  
**Michael B. Frisch**, Baylor University  
**Jeffrey J. Froh**, Hofstra University  
**Nancy A. Fry**, University of Kansas  
**Thomas Fuller-Rowell**, Cornell University  
**Shelly L. Gable**, University of California – Santa Barbara  
**Matthew N. Gallagher**, University of Kansas  
**Julie A. Garcia**, California State Polytechnic University, San Luis Obispo  
**John C. Gibbs**, Ohio State University  
**Omri Gillath**, University of Kansas  
**Jane E. Gillham**, Swarthmore College and University of Pennsylvania

- Rich Gilman**, University of Kentucky  
**Michael D. Gomez**, University of Kansas  
**Benjamin M. Gottlieb**, University of Guelph  
**Michael C. Gottlieb**, Private practice, Dallas, Texas  
**Anthony M. Grant**, University of Sydney  
**Tiffany M. Greene-Shortridge**, Clemson University  
**Tobias Greitemeyer**, Ludwig Maximilians University Munich  
**Maya C. Gupta**, University of Pennsylvania  
**Gail Hackett**, Arizona State University  
**Mitchell M. Handelsman**, University of Colorado at Denver and Health Sciences Center  
**Jo-Ida C. Hansen**, University of Minnesota  
**Kurt M. Hanus**, Michigan City High School  
**Jim Harter**, Gallup  
**John H. Harvey**, University of Iowa  
**Yuhong He**, University of Missouri – Columbia  
**Kathi L. Heffner**, Ohio University  
**Charles C. Helwig**, University of Toronto  
**Susan S. Hendrick**, Texas Tech University  
**Clyde Hendrick**, Texas Tech University  
**P. Paul Heppner**, University of Missouri – Columbia  
**Janette E. Herbers**, University of Minnesota – Twin Cities  
**John P. Hewitt**, University of Massachusetts  
**E. Tory Higgins**, Columbia University  
**Michael F. Hock**, University of Kansas  
**Timothy D. Hodges**, Gallup  
**Mark D. Holder**, University of British Columbia, Okanagan  
**Ryan T. Howell**, San Francisco State University  
**Peter H. Huang**, Temple University  
**Scott Huebner**, University of South Carolina  
**Eileen Hulme**, Azusa Pacific University  
**Stephen S. Illardi**, University of Kansas  
**Marcy Young Illies**, University of Nebraska-Omaha  
**Joseph James**, University of Nebraska-Omaha  
**Keyona M. Jarrett**, Marquette University  
**Sherlyn Jimenez**, University of Connecticut  
**Danielle Johnson**, University of Kansas  
**Janice E. Jones**, Cardinal Stritch University  
**Stephen Joseph**, University of Nottingham  
**Rosabeth Moss Kanter**, Harvard Business School  
**Jan C. Kapsner**, University of Kansas  
**Todd B. Kashdan**, George Mason University  
**Carol Kauffman**, Harvard Medical School  
**Jerry Kernes**, University of La Verne  
**Barbara Kerr**, University of Kansas  
**Timothy Ketelaar**, New Mexico State University  
**Eric B. Keverne**, University of Cambridge  
**Corey L. M. Keyes**, Emory University

**Melinda J. Key-Roberts**, University of Kansas  
**Sara Cho Kim**, University of Wisconsin – Madison  
**Neal M. Kingston**, University of Kansas  
**Richard T. Kinnier**, Arizona State University  
**Andrea Klassen**, University of British Columbia, Okanagan  
**Samuel Knapp**, The Pennsylvania Psychological Association  
**Nina Knoll Charité**, Universitätsmedizin Berlin, Germany  
**Pamela L. Knox**, Tennessee Board of Regents  
**Anna Kratz**, Arizona State University  
**Lindsey M. Lamb**, University of Texas at Austin  
**Ellen Langer**, Harvard University  
**Alfried Längle**, International Society of Logotherapy and Existential Analysis, Vienna  
**Suzanne C. Lechner**, University of Miami  
**Debbiesiu Lee**, University of Miami  
**Dong-gwi Lee**, Yonsei University  
**Robert W. Lent**, University of Maryland  
**Adrienne Leslie-Toogood**, Kansas State University  
**Marvin Levine**, Stony Brook University  
**Lisa Lewis**, The Menninger Clinic  
**James W. Lichtenberg**, University of Kansas  
**Eric W. Lindsey**, Penn State Berks  
**P. Alex Linley**, Centre for Applied Positive Psychology, UK  
**David A. Lishner**, University of Wisconsin Oshkosh  
**Todd D. Little**, University of Kansas

**Miguel Pereira Lopes**, Instituto Superior de Psicologia Aplicada, Lisbon, Portugal  
**Fredrick G. Lopez**, University of Houston  
**Shane J. Lopez**, The Clifton Strengths Institute and Gallup  
**Patricia A. Lowe**, University of Kansas  
**Fred Luthans**, University of Nebraska-Lincoln  
**James E. Maddux**, George Mason University  
**Jeana L. Magyar-Moe**, University of Wisconsin – Stevens Point  
**Lars-Erik Malmberg**, Oxford University  
**John Maltby**, University of Leicester  
**Anna L. Marsland**, University of Pittsburgh  
**Rod A. Martin**, University of Western Ontario  
**Michelle Mason**, University of Minnesota – Twin Cities  
**Ann S. Masten**, University of Minnesota – Twin Cities  
**Dan P. McAdams**, Northwestern University  
**Charlotte M. McCloskey**, University of Missouri – Columbia  
**Rollin McCraty**, Institute of HeartMath  
**Robyn McKay**, University of Kansas  
**Joav Merrick**, National Institute of Child Health and Human Development, Israel  
**Barret Michalec**, Emory University  
**Tamara Coder Mikinski**, University of Kansas  
**Kimberley R. Monden**, University of Kansas  
**Judith Tedlie Moskowitz**, University of California – San Francisco

**Donald Moss**, Saybrook Graduate  
School and Research Center

**Gale D. Muller**, Gallup

**Merrishia Singh**, Naicker Bethel  
University

**Jeanne Nakamura**, Claremont  
Graduate University

**Sonal Nalkur**, Emory University

**Kristin Naragon**, University of Iowa

**Kristin D. Neff**, University of Texas  
at Austin

**David W. Nickelson**, American  
Psychological Association

**Joseph O'Brien**, University of Kansas

**Kristin Koetting O'Byrne**, Live  
What You Wear

**Heather N. Odle-Dusseau**, Clemson  
University

**Lizetta Ojeda**, University of  
Missouri

**Anthony D. Ong**, Cornell University

**Silvia Osswald**, Ludwig Maximilians  
University Munich

**Rhea L. Owens**, University of Kansas

**Daphna Oyserman**, University of  
Michigan

**Nicky Page**, Centre for Applied  
Positive Psychology, UK

**Patricia Jardim de Palma**, Instituto  
Superior de Psicologia Aplicada,  
Lisbon, Portugal

**Anthony Papa**, Department of  
Veterans Affairs, Boston Health  
Care System

**Kenneth I. Pargament**, Bowling  
Green State University

**Nansook Park**, University of Rhode  
Island

**Acacia C. Parks-Sheiner**, University  
of Pennsylvania

**James O. Pawelski**, University of  
Pennsylvania

**Beth Pearson**, Case Western Reserve  
University

**Jennifer Teramoto Pedrotti**,  
California Polytechnic State

University, San Luis Obispo

**Michael S. Perciful**, University of  
Dayton

**Elaine Perea**, Arizona State  
University

**Stephanie E. Petersen**, Private  
practice, Houston, Texas

**Christopher Peterson**, University of  
Michigan

**Jean S. Phinney**, California State  
University, Los Angeles

**Miguel Pina e Cunha**, Universidade  
Nova de Lisboa, Lisbon, Portugal

**Nicholas E. Pisca**, Santa Clara  
University

**Sarah D. Pressman**, University of  
Pittsburgh Medical Center

**James O. Prochaska**, University of  
Rhode Island

**Janice M. Prochaska**, Pro-Change  
Behavior Systems, Inc.

**Cynthia L. S. Pury**, Clemson  
University

**Jennifer M. Raad**, University of  
Kansas

**Tayyab Rashid**, University of  
Pennsylvania

**Heather Rasmussen**, University of  
Kansas

**Kristin N. Rasmussen**, University of  
Kansas

**Connie Rath**, Gallup

**Robert A. Rees**, Institute of  
HeartMath

**Arménio Rego**, Universidade de  
Aveiro, Portugal

**John W. Reich**, Arizona State  
University

**Roni Reiter-Palmon**, University of  
Nebraska-Omaha

**Karen J. Reivich**, University of  
Pennsylvania

**Jeff G. Rettew**, University of  
Kansas  
**Grant J. Rich**, University of Alaska  
Southeast  
**Ronald E. Riggio**, Claremont  
McKenna College  
**Brent Dean Robbins**, Daemen  
College  
**Cecil Robinson**, University of  
Alabama  
**Christine Robitschek**, Texas Tech  
University  
**Sonia Roccas**, The Open University  
of Israel  
**Thais Piassa Rogatko**, University  
of Maryland, Baltimore  
County  
**Leoandra Rogers**, New York  
University  
**Sage Rose**, Hofstra University  
**Brent Rosso**, University of  
Michigan  
**Guy Roth**, Ben-Gurion University of  
the Negev  
**Paul Rozin**, University of  
Pennsylvania  
**Willibald Ruch**, University of Zurich,  
Switzerland  
**Chiara Ruini**, University of Bologna,  
Italy  
**Sandra W. Russ**, Case Western  
Reserve University  
**Joseph J. Ryan**, University of Central  
Missouri  
**Richard M. Ryan**, University of  
Rochester  
**Lilach Sagiv**, Hebrew University of  
Jerusalem  
**Dennis Saleebey**, University of  
Kansas  
**Peter Salovey**, Yale University  
**Phia Salter**, University of Kansas  
**Diana T. Sanchez**, Rutgers  
University, New Brunswick

**Steven J. Sandage**, Bethel University  
**Michael F. Scheier**, Carnegie Mellon  
University  
**Deidra J. Schleicher**, Purdue  
University  
**Laurie A. Schreiner**, Azusa Pacific  
University  
**Peter Schulman**, University of  
Pennsylvania  
**Ralf Schwarzer**, Freie Universität  
Berlin, Germany  
**Cherisse L. Seaton**, University of  
Northern British Columbia  
**Peter Seligman**, University of  
Pennsylvania  
**Ilana Shapiro**, University of  
Massachusetts  
**Sauna L. Shapiro**, Santa Clara  
University  
**Kennon M. Sheldon**, University of  
Missouri-Columbia  
**Michelle N. Shiota**, Arizona State  
University  
**Arie Shirom**, Tel Aviv University  
**Karrie A. Shogren**, University of  
Texas at Austin  
**Hal S. Shorey**, Massachusetts  
General Hospital / Harvard  
Medical School  
**Ofra Shrager**, Tel Aviv University  
**Jordan Silberman**, Children's  
Hospital of Philadelphia  
**Paul J. Silvia**, University of North  
Carolina at Greensboro  
**Karin Sommer**, University of Zurich,  
Switzerland  
**Scott Sonenschein**, University of  
Michigan  
**Nicholas Sorensen**, University of  
Michigan  
**Sarah Cain Spannagel**, Case Western  
Reserve University  
**Cynthia Sperring**, Texas Tech  
University



**Annette L. Stanton**, University of California – Los Angeles

**Michael F. Steger**, University of Louisville

**Robert J. Sternberg**, Yale University

**E. L. Stocks**, University of Texas at Tyler

**Amy Strachman**, University of California – Los Angeles

**Elin B. Strand**, Oslo University College

**Eunkook M. Suh**, Yonsei University

**Sarah J. Sullivan**, University of California – Los Angeles

**Scott W. Sumerall**, Department of Veterans Affairs, Eastern Kansas Health Care System

**Jean Ann Summers**, University of Kansas

**Louise Sundararajan**, Regional Forensic Unit, Rochester, NY

**Minsun Sung**, Yonsei University

**Angelina R. Sutin**, National Institute on Aging, National Institute of Health

**Maggie Syme**, University of Kansas

**Rebecca Syme**, University of Bethel

**June P. Tangney**, George Mason University

**Shelley E. Taylor**, University of California – Los Angeles

**Howard Tennen**, University of Connecticut School of Medicine

**Theresa A. Thorkildsen**, University of Illinois at Chicago

**Valerie Tiberius**, University of Minnesota

**John W. Toumbourou**, Deakin University

**Michele M. Tugade**, Vassar College

**Ann P. Turnbull**, University of Kansas

**Gitendra Uswatte**, University of Alabama at Birmingham

**George Vaillant**, Brigham & Women's Hospital, Harvard Medical School

**Søren Ventegodt**, Nordic School of Holistic Medicine, Research Clinic for Holistic Medicine and Inter-University College, Graz

**Roger Verdon**, The Menninger Clinic

**Joar Vittersø**, University of Tromsø, Norway

**Johanna Vollhardt**, University of Massachusetts

**John C. Wade**, University of Kansas

**Theodore Walls**, University of Rhode Island

**W. Bruce Walsh**, Ohio State University

**Uta M. Walter**, Catholic University of Applied Sciences, Berlin, Germany

**Laurie E. Wasko**, Clemson University

**David Watson**, University of Iowa

**Michael L. Wehmeyer**, University of Kansas

**Netta Weinstein**, University of Rochester

**Kirsten J. Wells**, University of Kansas

**Frederick J. Wertz**, Fordham University

**Steven White**, University of Kansas

**Carol Williams-Nickelson**, American Psychological Association

**Gail M. Williamson**, University of Georgia

**Charlotte vanOyen Witvliet**, Hope College

**Paul T. P. Wong**, Tyndale University College

**Y. Joel Wong**, Indiana University Bloomington

**Cooper Woodard**, Wheaton College

**Amy Wrzesniewski**, Yale  
University

**Sylvia Xiaohua, Chen** Hong Kong  
Polytechnic University

**Ya-Ting Tina Yang**, University of  
Kansas

**Carolyn M. Youssef**, Bellvue  
University

**Alex J. Zautra**, Arizona State  
University

**Brian J. Zinnbauer**, Cincinnati  
Therapy Solutions

# Foreword

Positive Psychology has burgeoned in the past decade. From gleams in the eyes of Ray Fowler, Mihaly Csikszentmihalyi, and me in 1998 it has grown into a discipline. It can boast of:

- several thousand journal articles;
- two dozen tradebooks;
- a handful of textbooks, for example Peterson's *Primer of Positive Psychology* and Snyder and Lopez's *Positive Psychology*;
- substantial scientific grants;
- flourishing research laboratories;
- research and practice centers around the globe;
- the International Positive Psychology Association with more than 2,500 members;
- hundreds of courses including the most popular one at Harvard;
- advanced degree programs led by the Masters of Applied Positive Psychology at Penn;
- a website [www.authentichappiness.org](http://www.authentichappiness.org) with more than one million registrants; and
- best of all – critics (happiness is not motherhood and apple pie)!

Googling “Positive Psychology” from 1900 to 1997 will get you a handful of citations, since 1998; however, there are several hundred thousand references.

Why has Positive Psychology become a legitimate and popular scholarly endeavor, say in contrast to Humanistic Psychology of the 1950s, which shares many of its premises with one major exception – mainstream, cumulative, and replicable scientific method? The city of Florence in the fifteenth century offers a clue. When nations are at war, in famine, poor, and in civil turmoil, it is quite natural that the endeavors they support will be about defense and damage. When nations are (relatively) peaceful, sated, wealthy, and harmonious, they ask, not just about removing the disabling conditions of life, but about creating the enabling and ennobling conditions of life. Cosimo the Great's Florence decided to devote its surplus to beauty and gave us what was later called “Renaissance.” The wealthy world of the late twentieth century met most of these conditions and the call for a Positive Psychology – a psychology that was not just about suffering, trauma, depression, victims, irrationality, madness, and crime – did

not fall on deaf ears. This Encyclopedia embodies what is known in this new discipline today.

What might tomorrow hold?

- Positive Physical Health
- Positive Neuroscience
- Positive Social Science
- Positive Education.

The logic is after all the same. Positive Psychology argues that mental health is something over and above the absence of mental illness. I predict that these new disciplines will hold that:

- Physical health is something over and above the absence of physical illness.
- Neuroscience can be much more than just the study of the diseased brain.
- Political Science, Sociology, Anthropology, Economics, and History can be much more than the study of how institutions go wrong.
- Education will become more than the building of tools for success and achievement, but for teaching fulfillment and well-being as well and that these new disciplines will, like Positive Psychology, flourish.

Martin E. P. Seligman, PhD  
Fox Leadership Professor of Psychology at the  
University of Pennsylvania and  
Director of the Positive Psychology Network

## Preface

A decade ago, “positive psychology” became a buzz term in academic circles; today it is casually referred to on network television, in magazines, and on-line. Indeed, positive psychology has become a primary focus of scholars in the hallowed halls of universities and a topic of discussion for people on the park benches in downtown America.

Though it has become a popular term and field of study, it is hardly a well-understood one. My hope is that the entries in the *Encyclopedia of Positive Psychology* clarify any misunderstanding and round out your knowledge of what is positive about people and places.

The scholarly work that has been done in all corners of the world warrants closer examination by a broader readership. Enjoy learning about positive psychology concepts and principles. And, please do me this one favor . . . share your newfound knowledge with other people. That would help me realize my purpose for working on this encyclopedia, giving positive psychology away.

Shane J. Lopez  
Omaha, Nebraska

## Acknowledgments

Literally hundreds of people contributed to this attempt to give positive psychology away to a new readership. Indeed, the *Encyclopedia of Positive Psychology* is a product of positive psychology in action. Lots of love, social support, and wisdom came from Allison Rose Lopez and Neil Salkind. Hope was the outcome of many chats over coffee with Anne Beauchamp, who did a masterful job in her role as Associate Editor and manager of this huge project. My friends, Naif Al-Mutawa, Lisa Edwards, Amy Fineburg, Alex Linley, and Tom Rath gave generously of their time and expertise when generating and reviewing entries. And, Candie Ackerman brought open-mindedness and persistence to a series of tasks that helped us get this project done.

My deep gratitude goes to each of the contributors who shared their discoveries with us, and to you, the reader, who has invested some time in learning about the positive in the world.

Shane J. Lopez  
Omaha, Nebraska



## Abnormal Psychology

Stephanie E. Petersen

*Private practice, Houston, Texas*

Abnormal psychology is the area of psychological investigation concerned with understanding the nature of individual pathologies of the mind, mood, and behavior. It addresses dysfunction associated with distress or impairment in functioning and a response that is not typical or culturally expected. Such dysfunction should be considered on a continuum, rather than solely whether it is present or absent. Clinical assessment and diagnosis are important processes in the understanding and treatment of abnormal behavior, or psychopathology. Clinical assessment involves the evaluation of psychological, biological, and social factors in an individual presenting with abnormal behavior or symptoms of a possible psychological disorder. Diagnosis refers to the determination of whether reported problems or symptoms meet the criteria of a psychological disorder. As there are no specific lab tests to identify the presence of a disorder, diagnosis depends on the client report of symptoms, clinician observation of behavior, and signs from a mental status examination. *The Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM-IV) provides a recognized classification system for identifying abnormal behavior. It includes disorders arranged in a number of major diagnostic classes: disorders usually first diagnosed in childhood (e.g., mental retardation, learning disorders, pervasive developmental disorders); delirium, dementia, amnesic, and cognitive disorders; substance-related disorders (i.e., substance use disorders, and substance-induced disorders); schizophrenia and other psychotic disorders; mood disorders (i.e., depressive and bipolar disorders); anxiety disorders; somatoform disorders; factitious disorders; dissociative disorders; sexual and gender identity disorders; eating disorders; sleep disorders; impulse-control disorders; adjustment

disorders; and personality disorders. Personality disorders reflect an enduring pattern of functioning that deviates from the expectations of an individual's culture. They are also pervasive and inflexible, have an onset in adolescence or early adulthood, are stable over time, and lead to distress/impairment. There are three clusters of personality disorders based on descriptive similarities. Cluster A reflects odd/eccentric behavior and includes paranoid, schizoid, and schizotypal personality disorders. Cluster B reflects dramatic, emotional, and erratic behavior, and includes antisocial, borderline, histrionic, and narcissistic personality disorders. Cluster C reflects anxious/fearful behavior, and includes avoidant, dependent, and obsessive-compulsive personality disorders. Culture often sets parameters for what is viewed to be pathological versus what is not. For example, prior to 1980 the DSM included homosexuality as a mental disorder; it has since been removed from the DSM and is seen as part of normality. Diagnosis continues to evolve as the understanding of mental disorders increases. This is reflected by changes to each new edition of the DSM. Diagnosis is limited by clinical judgment about whether an individual's symptoms meet diagnostic criteria. Cultural differences can be misinterpreted as impairments if the clinician is not sensitive to the cultural context.

Conceptions of abnormal behavior have changed considerably over time. Efforts to understand problematic behavior often derive from the prevailing theories of behavior that are popular at any given time. During the fourteenth to fifteenth centuries supernatural traditions prevailed which suggested that deviant behavior was defined by the battle between good and evil. Bizarre behavior was seen as the work of the devil and witches and drastic action was taken against those who were viewed to be possessed, such as exorcism. Later, biological traditions proposed physical causes for mental disorders. Hippocrates, known as the father of modern medicine, suggested that mental disorders were caused by brain pathology or head trauma. Brain functioning was proposed to be related to four bodily fluids or humors – blood, black bile, yellow bile, and phlegm – which emanated from different organs. Disease resulted from too much or too little of the fluids. For example, too much black bile was thought to lead to melancholia (depression). The biological tradition flourished in the nineteenth century, leading to increased institutionalization for those with mental illness. Psychological traditions soon developed. The approach of moral therapy developed to treat patients as normally as possible in environments providing the opportunity for social interaction. By the twentieth century two major psychological approaches emerged. Sigmund Freud developed the psychoanalytical approach which emphasized the influence of unconscious processes on abnormal behavior. Behaviorism also emerged with a focus on learning and adaptation in the development of psychopathology. The prevailing theory is now one of a multidimensional model of psychopathology (integrating biological, behavioral, cognitive, emotional, and social factors). This biopsychosocial model has been attributed to the work of George Engel. He described a framework from which to understand health and disease, offering a broad view that biological factors alone are not enough to explain health



and illness. Biopsychosocial factors are thought to be involved in the development, course, and outcome of illness, including mental disorders. The relative importance of any one factor on causation varies. The role of these factors also varies across individuals, and across stages of the lifespan. Biological influences include the role of genetics in the development of illness. It is a challenge to determine which genes affect behavior and how. It is expected that no single gene or even combination of genes determines whether someone will develop a disorder, but rather genes providing risk interact with environmental factors. Psychosocial influences include stressful life events, one's personality and temperament, interpersonal relationships, and culture. Various terms are used in discussing the etiology of mental illness, such as correlation, causation, and consequence. Correlation refers to the association between two or more events, and does not necessarily mean causation. Correlation studies have identified risk factors, which are biological, psychological, or sociocultural variables that increase the probability for developing a given disorder. Causation is difficult to establish, particularly due to the challenges of experimental research involving human subjects.

There are several research strategies for studying psychopathology, with the ultimate goal to uncover the causes of a particular disorder. Case study methodology provides detailed examination of a single individual; it provides detailed understanding of the given individual, but not general psychological principles. Epidemiological studies address the distribution of disorders in a given population, and the variables that are associated with the distribution. To study genetic and environmental influences, behavior-genetic paradigms are used which involve family, twin, and adoption studies. Environmental studies also address shared versus non-shared influences on psychopathology. Biological studies include psychophysiological research which addresses the impact of physiological responses on psychological processes, and utilizes brain imaging technology to document the structure and functioning of the brain. Psychopathology research is increasingly turning to hybrid forms of research design to address multiple methodological approaches simultaneously.

Treatment for mental disorders has evolved since the deinstitutionalization movement of the 1950s. Treatments may be pharmacological, psychological, or a combination of both. Much research has focused on the effectiveness of psychotherapy for psychological disorders. Most prominently, Hans Eysenck questioned the effectiveness of psychotherapy in papers in 1952 and 1960. This spurred increased attention to the study of therapeutic effectiveness, and in 1977 Smith and Glass reported that therapy works after utilizing meta-analysis. With increased efforts to study therapy outcomes has come increased attention to the development of empirically-based treatment for psychological disorders. The goal is the identification of which treatment is most effective for which person.

SEE ALSO: ► Clinical psychology ► Developmental psychopathology  
 ► *Diagnostic and Statistical Manual* ► Mental illness ► Psychopathology

## Academic Achievement

Amy C. Fineburg

*Spain Park High School/The University of Alabama*

*Academic achievement* refers to any measure of a student's progress in a scholastic setting or in an academically related subject area. Academic achievement is usually measured by a student's subject test scores, course grades, standardized test scores, or matriculation through school. The body of research related to academic achievement is significant. Numerous research studies use some measure called academic achievement. Academic achievement has been studied since the early days of psychology. Such notable psychologists as James, Lewin, Festinger, and McClelland have all made important early contributions to the study of academic achievement.

Researchers use many different types of behaviors and measures to quantify academic achievement. Most studies use these measures to determine how some intervention, teaching technique, student condition, or learning situation affects achievement. Test scores and course grades are the most typically used measures of academic achievement. Often test scores result from assessments given during the course (e.g., a midterm or final exam grade), but test scores can also stem from standardized tests. Qualitative research in academic achievement utilizes interviews and alternative assessment techniques (e.g., portfolios, journal responses, etc.). These qualitative measures attempt to reveal aspects of academic achievement that may not be apparent in traditional pen-and-paper tests, such as cultural bias, nonverbal ability, or creativity.

Academic achievement is believed to be related to intellectual ability. One of the primary ways psychologists measure intellectual ability is through intelligence tests. Intelligence has been a popular indicator of academic achievement since Alfred Binet and Theodore Simon developed the first intelligence tests to determine the academic fitness of children in France. The exact nature of intelligence has been debated over the past century. Charles Spearman in the early 1900s advocated for a generalized view of intelligence (called the *g* factor). This *g* factor was thought to pervade all aspects of life so that a person who was intelligent in one subject would also be intelligent in another. Lewis Terman, who brought the original Binet-Simon test to the United States, developed a formula for calculating intelligence by dividing mental age (the score from the test) with chronological age and multiplying by 100. Studies throughout the years have shown a correlation between this intelligence quotient (IQ) and academic achievement. Modern theorists and researchers, such as Howard Gardner and Robert Sternberg, believe that intelligence is a combination of several factors, and people can be intelligent in one or more areas and perhaps not in others. Intelligence tests, such as the Stanford-Binet and the Wechsler Intelligence Scale for Children (WISC), are often used by school districts to identify students who might need special education

services, either for mental retardation or for giftedness, although they are not typically used as the only determinant of special education placement. Critics of intelligence tests believe that the tests harbor cultural and socioeconomic biases that inordinately identify minority and lower-income children as academically challenged.

Numerous lines of research have revealed other factors that lead to determining and defining academic achievement. The level of intrinsic and extrinsic motivation one has can be related to academic achievement. Intrinsic motivation is that which is inherently desirable, such as enjoying an activity for its own sake, while extrinsic motivation includes externally valuable rewards for behavior. Studies indicate that intrinsic motivation leads to higher long-term academic achievement. People who report that when they participate in activities for their own sakes, they work harder and longer toward accomplishing the goals they set. Extrinsic motivation often leads to less enjoyment in a given activity, particularly in terms of the overjustification effect. Studies on the overjustification effect have shown that when people are rewarded for activities they find inherently enjoyable (e.g., learning), they will lose their intrinsic motivation for the activity and rely on the extrinsic rewards. Whether externally valuable rewards such as grades have a detrimental effect on academic achievement is unclear, however.

The goals students set for themselves can also affect academic achievement. C. R. Snyder's hope theory suggests that the quality of a goal determines whether one is hopeful. Snyder proposes that those who set easily achievable goals, such as watching TV all day, will not show high levels of hope even though they have set concrete goals. Goals that are too easily achieved do not lead to developing suitable pathways or require high levels of agency for achieving the goals. The same is true for those who set unreasonable goals. Snyder believed that goals should be challenging, yet achievable in order to lead to high levels of hope. A complementary line of research is goal orientation theory, formulated by Nicholls, Dweck, and Ames, as well as others. These researchers have found that the type of goals students set for themselves influences their academic performance. They identified two main types of goals related to academic achievement: mastery goals, which focus on learning the material or mastering a skill; and performance goals, which focus on earning a particular grade or doing better than another student. According to Dweck, students who set mastery goals do better in school and are resilient in the face of failure. Performance-oriented students do not seek out challenges, but only pursue those activities that will guarantee success. Performance-oriented students experience less academic achievement than their mastery-oriented counterparts. Both hope and goal orientation research suggest that the quality and type of goals affect academic achievement.

The types of attributions students make about failure can affect achievement. Weiner's attribution theory predicts that students who make stable attributions about failure experience self-pity and decreased effort. Seligman's explanatory style theory suggests that pessimistic students who are at risk for depression often underachieve. A pessimistic explanatory style predicts that students who fail will

explain the event as internal (“I’m so stupid!”), stable (“I’ll never do well in this subject!”), and global (“I must be a terrible student overall!”). These types of attributions about academic failure lead students to underachieve.

Social and cultural factors that influence academic achievement include socioeconomic status (SES), racial/ethnic status, and gender. Students who live in low SES neighborhoods and attend schools that are poorly funded typically achieve less than their more affluent counterparts. Students in certain minority groups (i.e., Hispanic, African American) that are typically impoverished also underachieve, yet other minority groups (i.e., Asian American) achieve as well or better than the majority students. In addition, female students tend to underachieve in certain areas (e.g., math and science) when compared with their male counterparts. Students’ perception of racial and ethnic stereotypes about their own group can influence how well they achieve on certain standardized tests. Claude Steele and Josh Aronson have identified a phenomenon known as stereotype threat that reveals the impact of prejudice on academic achievement. When students are made aware of the stereotypes about their own group, they tend to perform on standardized tests in the way the stereotype would predict. For instance, African American students scored lower on standardized tests than their White peers when told that the test would reveal innate intelligence. In addition, White students underperformed on standardized tests as compared to Asians when Whites were told the test would reveal skill in math. Research in stereotype threat has shown that the activation of a stereotype can lead to decreases in academic performance in many different groups.

Current research into academic achievement focuses on narrowing the definition of the term and pinpointing which factors most influence achievement. Researchers also debate how well traditional academic measures reveal true achievement. Legislation such as the No Child Left Behind Act (2002) defines academic achievement in terms of progress on standardized tests. This type of federal attention to test scores spurs research on practices that increase the scores. Leading psychologists have criticized such reliance on standardized test scores. Some argue that establishing benchmarks for all students of a particular age to achieve neglects issues in developmental readiness and individual progress. For instance, Robert Sternberg and Howard Gardner advocate a broad view of intelligence, and in turn academic achievement, which encompasses academic and non-academic domains. In their *Handbook of Competence and Motivation*, Andrew Elliot and Carol Dweck suggest that academic achievement ought to be reformulated as competence. Elliot and Dweck argue that achievement is too broadly articulated, with no coherent parameters by which to measure it, and yet does not go far enough to grasp the breadth of achievement. They propose that competence more accurately reflects the behavioral constructs of achievement and allows for achievement to be studied beyond the classroom.

SEE ALSO: ► Goals and goal-setting theory ► Intelligence ► Seligman, Martin ► Snyder, C. R. ► Stereotype threat

# Actualizing Tendency

Kennon M. Sheldon

*University of Missouri – Columbia*

*Actualizing tendency* refers to an innate growth drive or impulse that is said to exist within all human beings. Proponents of the concept make the optimistic assumption that people have an inherent tendency to become more elaborated, integrated, and internally coordinated over time – that is, to grow and develop as personalities. Although not everyone grows throughout the lifespan, the potential remains throughout. The challenge for teachers, therapists, and service providers, then, is to help people “unlock” these sometimes-hidden capacities.

The idea that humans have inherent growth potentials can be traced back at least to Aristotle, and his proposal that all people are born with certain virtues whose recognition and cultivation leads to happiness. The idea reappears in the enlightenment era proposal that people naturally seek greater self-determination and happiness, and also in the romantic era proposal that people are naturally good and will develop into virtuous citizens unless the socialization process goes awry. Such assumptions became unpopular during the early twentieth century, as operant behaviorism and Freudian psychoanalysis dominated mainstream thinking. However, even at that time some theorists, such as Jackson, Smuts, Dewey, Piaget, Angyal, and Goldstein, began to make use of the actualizing concept. These originators of the organismic theoretical perspective shared in common a belief that human beings have an inherent drive towards increasing complexity, self-organization, and wholeness. Stated in abstract terms, living systems are open and able to maintain themselves far from equilibrium, resisting the universe’s dominant trend towards entropy or disorganization, by changing and elaborating their internal structures in response to perturbations and challenges. In this view *all* living things, not just humans, might be said to have an actualizing tendency, rooted in life’s ability to utilize energy in service of compensation, adaptation, and learning.

Today, the actualizing tendency idea is most closely associated with the humanistic psychologies of Abraham Maslow and Carl Rogers. Maslow proposed that all humans have a need for self-actualization, but that this need does not come to the fore until lower level needs for safety, belongingness, and esteem are met. In Maslow’s view the actualizing tendency is only contingently activated, and becomes fully manifest in only a rare few. In contrast, Rogers viewed the actualizing tendency as standard equipment in all human beings. Although people may sometimes get “stuck,” the tendency can be reactivated by skilled therapists who give unconditional positive regard, use empathy, and employ nondirective techniques. In particular, Rogers proposed that all people have an *organismic valuing process* (OVP) which enables them to perceive and enact the most health- and growth-relevant choices for themselves. Although the OVP is

subtle and its outputs easily overlooked or ignored, Rogers claimed that accurate internal information is always available given sufficient desire and attention. Notably, neither Maslow nor Rogers provided empirical research support for their ideas, an omission for which the humanistic psychologists were justifiably criticized.

Within contemporary research psychology, the actualizing tendency is probably best represented within Deci and Ryan's self-determination theory (SDT). This complex but comprehensive theory of human motivation was built on the concept of intrinsic motivation, in which people are internally motivated to explore and engage the environment, elaborating their knowledge and skills in the process. SDT's proactive view of human nature contrasts with the reactive views of earlier drive and learning theories. Later, the theory expanded to posit an *organismic integration process*, which motivates people to internalize and identify with important behaviors that are not intrinsically enjoyable (i.e., studying, diaper-changing). Indeed, there is evidence that this process does occur and is even normative; for example, older children perform socially valued behaviors, such as sharing with others and picking up their rooms, for more internalized reasons compared to younger children, and older adults pursue personal goals for more internalized reasons than younger adults. Given that internalized motivation typically correlates with measures of well-being and personal development, such normative temporal trends may be interpreted as supporting the existence of an innate actualizing tendency in all humans.

Sheldon, Arndt, and Houser-Marko provided specific empirical support for the existence of the OVP posited by Rogers, through an application of SDT's *organismic values* model. Sheldon, Arndt, and Houser-Marko showed that participants tend to shift towards intrinsic values (satisfying and growth-promoting; intimacy, growth, community) and away from extrinsic values (compensatory and less satisfying; money, image, fame), over periods of time ranging from 20 minutes to 6 weeks. Also, Sheldon showed that a similar biased shift away from extrinsic values and towards intrinsic values took place over the 4 years of the college career. Furthermore, Sheldon and Kasser showed that older adults listed more generativity and integrity strivings, compared to young adults who listed more identity strivings. They suggested that the observed age-based shift towards the higher levels of Erik Erikson's stage model of personality development represents the cumulative effects of the OVP and the actualizing tendency.

Importantly, SDT does not propose that growth and actualization tendencies will always win out; a properly supportive environment is required to facilitate these tendencies. Specifically, authorities, teachers, bosses, parents, therapists, and coaches should be autonomy supportive rather than controlling, if they want to maximize their charges' growth and self-organizational potentials. Perhaps paradoxically, if people are granted the freedom to decide for themselves what to do, then they are most likely to internalize the values that authorities want them to. In contrast, authorities who try to force-feed ideas to their charges, or to compel or coerce their behavior, tend to forestall the internalization process.

Another contemporary perspective relevant to the actualizing tendency is that of motivational interviewing (MI). MI is a set of techniques for resolving clients' ambivalence, thus helping them to move towards more adaptive ways of being, especially in the domain of health behavior. MI assumes that the impetus for positive change can only come from within the client, and must be discovered by the client with a minimum of interference and direction from the therapist. Instead, the therapist merely reflects and mirrors the different sides of the client's internal conflicts, so they may be integrated in a manner of the client's own making. Notably, MI and SDT are quite consistent with one another, providing complementary technical and theoretical resources for counselors and researchers.

Positive psychology is in part an attempt to rectify the biases of past research's focus on pathologies and errors. The actualizing tendency concept is quite relevant for positive psychology because the goal of enhancing actualization fits squarely with positive psychology's emphasis on understanding positive adaptation and change, i.e., thriving. Also, the actualizing concept helps to ground positive psychology's optimistic assumptions regarding human nature, via a perspective ultimately rooted in biology and living systems theory. In addition, the concept provides an important heuristic for helping situations, suggesting that encouraging people's self-direction and personal initiative may be paramount for helping them to reach new levels of thriving. Finally, the concept helps link positive psychology to its conceptual and historical precursors (i.e., the humanistic and organismic philosophical perspectives). Acknowledging such linkages is something that positive psychology sometimes seems reluctant to do, to its own and the field's detriment.

In future research, it will be important to develop concepts and measures for determining when the actualizing process is occurring within an individual's life, vs. when it is not occurring. Ideally, this account would include biological and neurofunctional markers, perhaps involving temporal lobe activation or complex intercoordination between different brain regions. Research also needs to understand better the routes to actualization. As suggested above, autonomy-supportive authorities may help to forward the process, as well as unconditional positive regard or psychological need-satisfaction in general. However, it is also apparent that positive change often occurs in the face of negative circumstances and great difficulties (i.e., post-traumatic growth), and research needs to understand the different initiators, processes, and results of growth derived from supportive vs. traumatizing life-circumstances. It will also be important to understand how exposure to inspirational peers and mentors might "kick-start" people's own actualizing process. Could actualization sometimes result from social contagion processes, such as those instantiated by transformational leaders? Obviously, these are crucial questions for a positively-oriented psychology.

SEE ALSO: ► Intentional self-development ► Maslow, Abraham  
 ► Positive therapy ► Rogers, Carl ► Self-determination

## Adaptability

Jeff G. Rettew

*University of Kansas*

*Adaptability* is the capacity to adjust oneself readily (without great difficulty) to fit changed circumstances. This adjustment can be psychological and/or physical in nature, and the changed circumstances can be positive, negative, or neutral. Given the constantly changing universe in which all things exist, the degree of someone or something's willingness and/or capacity to adapt is a barometer of the likelihood of continued existence, as well as the subjective quality of that existence.

The traditional connotation of adaptability is a positive one. While the capacity to adjust to novel circumstances is positive, adaptability can lead to both positive and negative outcomes. A unique and complex concept, adaptability plays an integral role in several essential domains of human existence. Among these domains are developmental adaptability, interpersonal functioning, and relationship with the world of work. Adaptability is especially pertinent to the field of positive psychology, the focus of which is on defining and cultivating optimal functioning.

Adaptability is merely the *capacity* to change. Whether a change is made, as well as the appropriateness of the degree of change, is another issue entirely. A person may have a high capacity for change, but low self-efficacy about the probability of successfully implementing that change. Although the person realizes that change is necessary, and possesses many of the physical and psychological resources to effect change, the confidence to take action renders that capacity moot. There are many parallels between this aspect of adaptability and the agency component of Snyder's hope theory. Higher levels of hope facilitate more positive adaptation, increasing well-being, as well as the number of goals to be achieved and their difficulty and complexity. Furthermore, like most things in this world, adaptability exists as a continuum. Accuracy and moderation are the keys to successful adaptation.

Adaptability is not always a positive force. *Hedonic adaptation*, one of the many forms of adaptability, refers to a situation where someone adjusts to a positive life event to the point where the event is taken for granted and loses its positive valence. Hedonic adaptation is part of the hedonic treadmill. According to the model, although new circumstances may cause temporary increases in happiness or sadness, people rapidly adjust, and the effect of these new circumstances on their well-being then quickly decreases or disappears entirely. For example, Brickman and colleagues showed that recent lottery winners were no happier than controls (nonlottery winners) and, furthermore, that recent victims of paralysis were not as unhappy as one would expect. Brickman further reasoned that no matter whether something makes you happier or sadder, you will always come back to your biologically predetermined happiness set point. However, Diener and colleagues found individual differences in the rate and extent of adaptation that occurs to the exact same event with regard to the effect on measures of life satisfaction or subjective well-being. Understanding individual differences in adaptation



is important because it will help in discovering when and why hedonic adaptation does and does not occur.

Adaptability is a complex psychological mechanism that has received much intrigue and scrutiny in recent years. *Resilience*, and its role in positive adaptation, has been of particular interest. Resilience is often referred to as the maintenance of successful positive adaptation despite experiences of significant adversity. Temperament, sex, intellectual ability, humor, empathy, social problem-solving skills, social expressiveness, and an inner locus of control have been found to influence adaptation under stressful or adverse conditions.

Buckingham and Clifton identified adaptability as one of the 34 talent themes measured by the Clifton StrengthsFinder. They define *talent* to mean a “naturally recurring pattern of thought, feeling, or behavior that can be productively applied” (Clifton, Anderson, & Schreiner, 2006, p. 2). A talent represents a capacity to do something. In the case of adaptability, that capacity is to live in the moment. Someone who possesses a high level of adaptability sees the future as something they make for themselves with their choices today. Adaptability enables them to be flexible and respond to the demands of the moment even if they diverge from plans for the future. They are extraordinarily flexible people able to stay productive when the demands of life are pulling them in many different directions at once.

## Career Adaptability

*Career adaptability* is the readiness to cope with the predictable tasks of preparing for and participating in one’s job, and also includes the willingness to deal with the unpredictable changes in work and working conditions. That adaptability is a highly valued commodity in the world of work today which is not surprising. In today’s ever-changing workplace, in which organizations are characterized by dynamic environments, the need for adaptive workers has become increasingly important. New technology, globalization, and modifications in jobs require workers to adapt to new and varied situations at work. This influx of new technology mutates the nature of various work tasks, and streamlining, or corporate “rightsizing,” requires employees to learn new skills to remain competitive for different jobs. For the majority of the work force, gone are the days of learning one skill set to be used for an entire career. Instead, effective performers in today’s organizations are those who anticipate future needs and adapt to changing job requirements by learning new tasks, technologies, procedures, and roles. Furthermore, the demands of an ever-increasingly global economy necessitate the capacity to adapt to different cultures and their subsequent values and orientations.

Pulakos and colleagues devised a multidimensional model to describe and measure adaptive job performance. The model consists of eight empirically generated dimensions: handling emergencies or crisis situations; handling work stress; solving problems creatively; dealing with uncertain and unpredictable work situations; learning work tasks, technologies, and procedures; demonstrating interpersonal

adaptability; demonstrating cultural adaptability; and demonstrating physically oriented adaptability. Indeed, adaptability has become so popular within the world of work that numerous researchers have suggested that adaptive characteristics should be one type of criteria used for personnel selection and performance evaluation. Some have even proposed that career adaptability replace career maturity as the central construct in career development theory.

## **Interpersonal/Social Adaptability**

Adaptability can also be applied to interpersonal relationships. It is a personal characteristic that allows an individual to change his or her way of being in order to relate better to another person or persons. For example, you would lower your voice in a library, avoid profanity in a church, and raise your hand during class even though deep down you might prefer to be loud, vulgar, and impetuous.

If an individual can maintain their authenticity while adapting to the different ideas, customs, and worldview of others, that is the ideal scenario. *Interpersonal adaptability* is defined by being able to make compromises and to adjust to changing circumstances. Being able to consistently consider someone else's needs is also a positive aspect of adaptability. This ability to adapt makes all other relationships more likely to be meaningful and successful, and is a great boon to overcoming the evolutionary problems of reproduction and survival.

The when, how, how much, what, and why of adaptability are all crucial questions, and ones that are answered in various ways. Some are gleaned by individuals on their own through trial and error. Others are learned from family, friends, and society in general. When there is too much adaptation, instability and chaos result. However, when there is not enough change, rigidity and intractability arise. These polar extremes are especially problematic in interpersonal or group dynamics. Therefore adaptability, like all things, must be accurately engaged to produce a positive result.

Social/cultural learning increases human adaptability, particularly in uncertain environments, because it allows us to obtain useful information without the costly individual learning process of trial and error. For example, if a hungry person comes across a patch of berries in a field, but does not know which ones are edible, the process of trial and error could prove fatal. However, the person can avoid this problem by relying on information from other people with prior experience. The acquisition of human food preferences is very heavily influenced by social/cultural adaptation.

## **Evolutionary Psychology**

Adaptability has also played a significant role in the evolution of mankind. The central aim of evolutionary psychology is to identify psychological mechanisms and behavioral strategies as evolved solutions to the adaptive problems that humans

have faced for millions of years. Human adaptive psychological mechanisms operate according to different principles across different adaptive domains, are many, and are complex solutions to specific adaptive problems. In general, these problems fall into two broad categories: problems of survival and problems of reproduction.

An example of evolutionary adaptability to address the problem of survival is infant attachment to the caregiver and early female interest in infants. An infant's fear of strangers is an adaptive psychological mechanism that has evolved to ensure the infant's safety and better its chances for survival. In addition to the examples of infant attachment to the caregiver, early female interest in infants, and infant avoidance of strangers, humans share with other primates many age-specific behavioral and psychological adaptations for survival and reproduction. Some of these adaptive traits have immediate fitness benefits at the age at which they are expressed, whereas others have delayed benefits that manifest later on. The capacity to adapt and change according to one's physical and social environment is an essential part of the development of human beings, both within their lifespan and across generations.

SEE ALSO: ► Career development ► Clifton StrengthsFinder  
► Evolutionary psychology ► Hope ► Vocation

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## Admiration

Sherry L. Beaumont

*University of Northern British Columbia*

Admiration is an emotional response involving pleasure, wonder, and reverence. Although admiration has been mentioned in the psychological literature for many years, it has only recently been studied empirically because it is representative of the many positive emotions that have become the focus of research by positive psychologists. According to Barbara Fredrickson, positive emotions are believed to be unique in that, unlike negative emotions which direct one's responses toward narrow and specific goals, they offer opportunities for broadening one's thought-action repertoire in a way that promotes positive well-being by increasing one's personal resources.

Admiration is among a group of positive emotions that are moral in nature. Moral emotions, as described by Haidt, are unique in that they are other-focused, rather than being focused directly on self-interests, and as such, they elicit prosocial or goal-directed behaviors that have potential benefits to others. Four

different families of moral emotions are discussed in the literature, including: (1) self-conscious emotions (shame, guilt, embarrassment); (2) other-suffering emotions (sympathy, compassion, empathy); (3) other-condemning emotions (contempt, anger, disgust); and, (4) other-praising emotions (gratitude, elevation, admiration). These latter emotions are the only ones that can be considered as positive moral emotions in that they involve emotional responsiveness to good deeds. Thus, as a positive moral emotion, the experience of admiration should broaden one's thought-action repertoire by recognizing goodness in other people.

Although the literature on admiration is sparse, available research by Haidt and colleagues suggests that admiration is triggered by specific contexts and elicits certain physical sensations. For example, whereas elevation is typically a response to witnessing excellence of the moral kind, admiration is a response to witnessing great skills or abilities. In a series of studies using video induction and self-report methods (recall and diary) to delineate the characteristics that make the other-praising emotions unique, in 2006, Algoe and colleagues found that both admiration and elevation produced a feeling of being "uplifted," but the experience of admiration was unique in producing excitement and energy. Thus, the experience of admiration is motivating because it activates one towards self-improvement; individuals who witnessed another person displaying great abilities reported the desire to achieve and to praise and emulate the person being admired. Finally, the experience of admiration was the only other-praising emotion that was associated with the kind of inspiration that includes having tears in one's eyes and experiencing chills or tingles.

In addition to being considered within the framework of positive emotions, the concept of admiration has also been considered as a character strength in a classification system for positive traits that includes 24 character strengths, which demonstrate six different virtues that appear to be valued across history and cultures. The core virtue of transcendence includes a character strength that involves aspects of admiration: namely, appreciation of beauty and excellence or awe, wonder, and elevation. Conceptualized in this way, the positive moral emotion of admiration is considered in a trait sense; a person who is high in the character strength of appreciation would have frequent emotional experiences of awe and its related emotions of admiration, wonder, and elevation, whereas a person who is low in appreciation would have fewer experiences of awe-related emotions. The practice of appreciating beauty and excellence is representative of the virtue of transcendence because it provides an experience of connecting to something larger than oneself. This argument is consistent with the consideration of awe-related emotions, including admiration, as important elements in a group of moral emotions referred to by Haidt as self-transcendent. Admiration, then, can be considered as an emotional response or aspect of character that motivates one toward self-improvement in a way that is transcendent.

SEE ALSO: ► Awe ► Haidt, Jonathan ► Heroes ► Positive emotions  
► Strengths (personality)

## Adult Attachment Security

Frederick G. Lopez

University of Houston

An *attachment* refers to a unique and enduring affectional bond between two persons and, according to attachment theory, the experience of security within these relationships favorably shapes individual developmental trajectories across the lifespan. Although originating in the study of infant and early child development, over the past two decades attachment theory has emerged as an important framework for understanding healthy and effective adult behavior.

### Attachment Security: Basic Concepts and Assumptions

Attachment theory posits that our human propensities to seek and form affectional bonds with others reflect the functioning of an independent and innate motivational system that is operational at birth, activated by the experience of fear, discomfort, or fatigue, and designed by evolution to protect the species from external threat and predation. In short, when stressed, infants are programmed to elicit care and protection from their caregivers who, in turn, are typically disposed to provide these resources to their offspring. The caregiver's appropriate responsiveness to the infant's proximity needs returns the system to a quiescent state, thus enabling the infant to engage in unfettered exploratory behaviors. To the extent that this recursive dynamic is a consistent feature of early infant-caregiver interactions, the infant experiences a secure attachment bond with the caregiver, and the relationship itself advances the child's acquisition of affect self-regulatory competencies by alternatively serving as a *safe haven* from situational threat and a *secure base* for autonomous exploration and progressive environmental mastery. By contrast, an insecure attachment is formed when the infant's bids for comfort or care are either inconsistently apprehended or consistently rejected by the caregiver. These problematic relational patterns are assumed to bias the normative functioning of the attachment system toward either chronic states of *hyperactivation* (i.e., excessive proximity-seeking behavior) or *deactivation* (i.e., proximity-seeking behavior is suppressed) that impede healthy personality development.

Early observational studies of mother-infant pairs during controlled episodes of threat, separation, and reunion (i.e., the "Strange Situation") reliably identified the presence of three different *attachment styles* (i.e., secure, anxious, avoidant) representing distinctive patterns of mother-infant interactions under these varying conditions. Attachment theory further assumes that, within the first year of life, the child comes to cognitively represent these relational patterns as part of an *internal working model of self and other* or IWM. By integrating self-perceptions of lovability and appraisals of the dependability of caregivers with interactional

strategies for managing the experience of insecurity, the IWM is presumed to function as a cognitive template (and thus an individual differences variable) that guides patterns of affective self-regulation and interpersonal behavior in later adult relationships.

## **The Conceptualization and Assessment of Adult Attachment Security**

Beginning in the mid-1980s, two parallel lines of research on the nature of adult attachment relationships emerged – one in developmental psychology and the other in social psychology, with each line fashioning different ways of conceptualizing and assessing the construct of adult attachment security. Developmental psychologists have generally conceptualized adult attachment in terms of one's recollections and accounts of early (childhood) experiences with adult caregivers gathered via a semi-structured interview (Adult Attachment Interview [AAI]). On the basis of the independently-rated discourse quality of AAI narratives, interviewees are reliably classified into one of four adult attachment "states of mind": *Secure/autonomous* persons demonstrate the capacity to provide thoughtful, reflective, and coherent answers to AAI probes. By contrast, persons classified into one of the remaining insecure groups are likely to respond to AAI questions by either emotionally disassembling (*preoccupied*), denying the emotional impacts of painful attachment experiences (*dismissing*), or otherwise lapsing into dissociative and dysfluent speech (*unresolved/disorganized*).

Social psychologists have alternatively conceptualized adult attachment security in terms of how persons describe their typical cognitive, affective, and behavioral responses to intimate peer relationships. Factor analyses of a large number of these self-report measures demonstrated that the specific nature of one's adult attachment organization can be characterized by the relative level of fears of rejection or abandonment by intimate partners (i.e., Attachment Anxiety) together with the corresponding level of expressed discomfort with closeness and intimacy (i.e., Attachment Avoidance). These two relatively independent dimensions are further assumed to create a conceptual space wherein four distinct adult attachment styles can be located. Adults with a *secure* style exhibit low scores on both dimensions, whereas persons with a *fearful* style report high scores on both dimensions. By contrast, adults with a *preoccupied* style evidence high levels of Attachment Anxiety but low levels of Avoidance, whereas those with a *dismissing* style demonstrate the opposite pattern (i.e., high scores on Avoidance, but low scores on Anxiety).

Although evidence of classification congruence between interview and self-report measures has been modest at best, both approaches yield moderately stable assessments that are nonredundant with scores on measures of more basic personality traits. Indeed, there is a growing consensus that each assessment method offers complementary and potentially integrative perspectives on the larger construct of adult attachment security.

## **Key Findings**

Whether assessed using interview or self-report methods, adult attachment security has been consistently related to more adaptive cognitive, affective, and interpersonal functioning. For instance, when compared to their less secure peers, secure adults generally demonstrate more flexible and optimistic cognitive processes, more differentiated, integrated, and resilient perceptions of self-worth, and more competent forms of coping and social behavior. Adult attachment security also has been linked to more confident academic and career exploration, higher levels of work satisfaction and parenting competence, stronger altruistic and prosocial orientations, more trusting, collaborative, and satisfying intimate relationships, and to evidence of post-traumatic growth. Furthermore, and consistent with theoretical expectations, adult attachment security has been related to more positive retrospective accounts of early family environments and, across several prospective studies, to more favorable developmental trajectories.

Research has progressed rapidly from an early focus on establishing bivariate associations between adult attachment security and various indicators of psychosocial functioning to more sophisticated correlational and experimental investigations of mediational processes capable of explaining these relationships. In particular, recent experimental studies have used either contextually-activated or subliminal methods to prime the experience of attachment security in order to establish causal associations with perceptual and self-regulatory processes and to differentiate conscious and nonconscious features of the construct. Also receiving greater current emphasis are observational studies of the care-seeking and care-giving behaviors of intimate adult couples as well as the operation of adult attachment dynamics in therapist–client relationships. Emergent findings in the latter domain indicate that variability in adult attachment security is related to distinct client patterns of symptom-reporting and help-seeking behavior, to transference and countertransference processes, and to the formation of effective working alliances.

## **Directions for Future Research**

The extant literature on adult attachment security also suggests several important directions for future inquiry. For instance, further theory-guided prospective studies of particular dyads (i.e., intimate couples, therapist–client, supervisor–worker) should yield a more nuanced understanding of how the attachment-related expectations and appraisals of both interactants cooperatively shape relationship processes and outcomes over time. Also, because few investigations have thus far studied adult attachment security within diverse samples, greater inquiry into how cultural variables may interact with attachment schema should prove useful. Lastly, emerging efforts to integrate attachment concepts and assumptions within broader systemic frameworks of affect-regulation, personality development,

and therapeutic change should advance the practical applications of research findings in promoting psychological health and effectiveness.

SEE ALSO: ► Amae ► Attachment theory ► Close relationships  
► Romantic love ► Successful aging

## Aerobic Activity

Susan H. Backhouse

*Leeds Metropolitan University*

A walk in the park, climbing the stairs at work, cycling through the forest, a game of soccer, and an early morning swim are all forms of aerobic activity. *Aerobic activity* is a continuous, rhythmic activity that uses large muscle groups, loads the cardiovascular system, and results in an increase in energy expenditure above resting levels. Aerobic exercise is a subcategory of aerobic activity that is planned, structured, and repetitive and is performed to maintain or improve aerobic fitness. A robust body of evidence demonstrates that regular aerobic exercise reduces morbidity and mortality for chronic diseases such as coronary heart disease, hypertension, stroke, diabetes, and some cancers. However, the advantage of aerobic exercise is not confined to preventing the aforementioned conditions. Mounting evidence now relates this mode of activity with enhanced psychological well-being, making aerobic exercise a viable pathway to many of the mind states espoused within positive psychology.

The “feel good” effect of aerobic exercise has been demonstrated through decreases in anxiety and depression and increases in mood and emotion, self-esteem, and cognitive functioning. However, even though empirical evidence demonstrates that single bouts of activity can make people feel better in the post-exercise time period, levels of inactivity remain high. Further, in today’s society physical exertion has been overtaken by mental exertion both in the workplace and at home. Therefore, we must seek to expend energy during our leisure time or by active integration into our daily routine. Engaging in regular aerobic activity holds considerable potential to enhance well-being and mental health. For example, individuals who partake in such activity routinely express feelings of achievement, control, energy, and in the case of group exercise, a sense of belonging, even in the presence of enduring mental ill-health. Given the diversity of possible psychological responses, this discussion will focus on the relationship between aerobic exercise and two aspects of well-being that embody the broad sweep of positive psychology – positive affect and self-esteem.

## Aerobic Activity and Positive Affect

Pleasure–displeasure and perceived activation are dimensions that suitably define *affect*, and pleasure is a key theme within positive psychology. A recent meta-analysis



demonstrated that single bouts of aerobic exercise can invoke feelings of high-intensity pleasure, such as energy, vigor, excitement, and revitalization. However, aerobic exercise is a complex behavior and the findings highlight that positive change relies on specific conditions. From 158 studies, analysis indicated that aerobic exercise was associated with a moderate increase in high-activation pleasant affect (average effect size of .47). Moreover, the positive effect of aerobic exercise was larger, more consistent, and generalizable for: a) assessments taken up to 5 minutes post-exercise; b) individuals reporting lower than average pre-exercise scores; c) exercise of low intensity; d) exercise durations up to 35 minutes; and e) low and moderate doses of exercise (a product of intensity and duration). These findings have practical implications because evidence from general psychology suggests that people tend to engage in activities that make them feel good and avoid activities that make them feel bad, or that cannot compete successfully with other more pleasant alternatives (e.g., resting). Therefore, physical activity promoters will find value in understanding that low-intensity exercise (e.g., walking) had almost double the post-exercise effect of moderate or high intensity exercise for eliciting high-activation pleasant affect.

Chronic aerobic exercise, involving repeated bouts of activity over a prolonged period of time, has also been found to elicit positive effects on affective states. A meta-analytic review by Puetz, O'Connor, and Dishman demonstrated that chronic exercise (average duration = 13 weeks) is moderately (average effect size of .37) associated with increased feelings of energy and reduced feelings of fatigue. This finding notwithstanding, a number of important methodological considerations were highlighted that are worthy of attention. For example, it is impossible to overlook the possibility of a placebo effect at the present time. This is due to the difficulties in designing robust placebo controls for studies examining the chronic effects of aerobic exercise on positive affect. Also, additional research is required to ascertain the generalizability of the positive findings to a healthy population. Of the studies included in the meta-analysis, 77% were based on groups reporting ill-health, such as cancer patients. Finally, the optimal dose of chronic exercise required to bring about positive changes remains unclear and systematic examination of the exercise stimulus (i.e., intensity, duration, mode, and frequency) is warranted. These limitations aside, positive effects on feelings of energy and fatigue have been corroborated in narrative reviews and epidemiological evidence suggests that the dose required to obtain such benefits may not be excessive. Indeed, low-intensity chronic exercise, such as walking, has also been shown to increase feelings of energy and lessen feelings of fatigue.

The observation that the greatest public health benefits will result from convincing the most sedentary segments of the population to become modestly active has resulted in a recent shift towards promoting walking for health. From a positive psychology perspective, low-intensity aerobic activity, such as a 30-minute walk, could present an optimal challenge for many individuals, offering an important experience of gratification. Achieving the goal of walking for 30 minutes may enhance one's sense of control through a combination of self-selecting this activity, feeling a sense of belonging through interaction with friends and being

in a pleasant environment. In today's society there are numerous passive but instantly pleasant activities (e.g., watching television) that directly compete with aerobic activity when it comes to allocating precious time and resources. However, such passive activities do not present the opportunity for positive changes across the biological and psychosocial domains and therefore it appears important to capitalize on all the elements of the aerobic activity experience when promoting its potential for achieving gratification. Importantly, aerobic activity can be tailored to meet idiosyncratic needs.

## **Aerobic Activity and Self-Esteem**

The self is constructed as multifaceted and context-dependent and this conceptualization helps to further our understanding of the exercise–self-esteem relationship. Self-esteem occupies a central position in the psychology of health and well-being. Briefly described, self-esteem refers to how we value ourselves and includes a global component concerning the perception of one's worth as a person, as well as judgments of personal competence or adequacy in particular domains. These domains include the physical, academic, social, emotional, and other elements of life.

Importantly, these self-constructs are not innate and a growing body of research suggests that they can be actively controlled or modified. Recently, the review provided by the Chief Medical Officer's report in the UK stated that one way for exercise to help individuals to feel better is through enhanced self-perceptions and improved self-esteem. The physical aspect of self-concept relates to individual perceptions of our physical appearance, capabilities, and skills. Given the potential positive impact of regular aerobic exercise on these aspects of the self, it is reasonable to suggest that changed levels of aerobic exercise may be linked to positive personal re-evaluation.

The past three decades of empirical investigation have consistently established a positive relationship between aerobic exercise and self-esteem. Thus, the conclusions of comprehensive narrative reviews are encouraging. However, the strength of the association between physical activity and global self-esteem change has been questioned. The more objective meta-analyses, spanning gender, age, and physical activity domains, consistently demonstrate that exercise brings about statistically significant increases in global self-esteem. However, these effects are *small*, often equivalent to an increase of approximately one-fourth of a standard deviation in global self-esteem.

Given the multifaceted nature of the self, the magnitude of change brought about by exercise participation in specific-self domains, such as physical self-perceptions (strength, appearance, skill, and endurance), has been larger than global changes. A recent meta-analysis conducted by Hausenblas and Fallon targeted 121 studies on the effects of exercise on body image, an element of physical self-worth. Comparing experimental and control groups showed a small positive influence

on body image (average effect size .28). However, important life cycle effects were noted, with adolescents demonstrating a significantly larger effect (.71) than adults (.25) or university students (.46). Furthermore, when exercise was fuelled by a combination of aerobic-type and strength activities, it also elicited a larger effect than aerobic or strength exercise alone.

Exercise, like the self, is multifaceted. Given the highly idiosyncratic nature of the self, researchers are tasked with the challenge of unraveling the complex relationship between aerobic exercise and self-esteem. However, the picture that has emerged up to this point is promising and, even allowing for differences across the life cycle, positive effects predominate. Moreover, favorable cognitions about the self with regard to the physical domain appear to be important in maintaining exercise behavior. Future investigations may be complemented by idiographic research to explore the different ways that individuals interpret the importance placed on physical activity, as a self-aspect, in their everyday lives.

Finally, the context in which aerobic activity takes place is worth highlighting. One can undertake aerobic activity individually or within a community of exercisers who present the opportunity for belonging and relatedness. The nature of such activity means it has the potential to influence all aspects of well-being. At the present time, few studies have taken into account the contextual factors involved in exercise behavior and, consequently, these aspects of well-being are ripe for examination. Moreover, the consideration of new positive psychology constructs, such as character strengths, offers exciting prospects for future study.

SEE ALSO: ► Global well-being ► Positive affectivity ► Relaxation  
► Self-esteem ► Vigor

## Aesthetic Appreciation

Kristin Koetting O'Byrne

*Live What You Wear*

*Aesthetic appreciation* is commonly referred to as the *appreciation of beauty and excellence*, defined by Peterson and Seligman as the ability to find, recognize, and take pleasure in goodness in the physical and social worlds. In the Values in Action classification of virtues and character strengths, appreciation of beauty and excellence is a character strength leading to transcendence, one of the six universal virtues. Transcendence and its strengths revolve around allowing individuals to go beyond connecting to others and to connect to the larger universe, which is believed to facilitate a more meaningful life. Peterson and Seligman propose three categories of good things that it is beneficial to appreciate: a) physical beauty (music is included in this category); b) skill or talent of others; and c) virtue or moral goodness (e.g., displays of forgiveness, kindness or other virtues, and character strengths).

Appreciation of beauty and excellence is a character strength, in part, because the related emotional experiences such as awe, wonder and elevation are uplifting. Peterson and Seligman further propose that people who are open to experiencing beauty and excellence find more joy and more meaning in their lives as well as a way to connect with others. Some skeptics speculate that viewing something beautiful, or witnessing excellence or a skilled performance, can intimidate observers. However, the uplifting feeling related to aesthetic appreciation does not crush us, but rather connects us to something larger than ourselves.

## Historical Perspectives on Aesthetic Appreciation

Humanistic psychologists such as Abraham Maslow and Carl Rogers embraced the emotional response to beauty and excellence as a component of humanistic psychology. In Maslow's hierarchy of needs, people who exhibit the character strength of appreciation of art and beauty are likely at the highest stages of self-actualization in which individuals evolve out of esteem needs and are likely more able to take pleasure in the talents, and virtuous acts of others. Further, Maslow believed that transcendence is a peak experience.

Although the appreciation of art and beauty is embraced by positive psychologists, it is unfortunate that the field of psychology has not been a forerunner in the research about the appreciation of beauty and excellence and related emotions (as of yet). The research that psychologists have contributed is primarily concerned with if observer's judgments of emotion in artwork are accurate, and how emotion is portrayed in the media. Thus, to understand more fully appreciation of art and beauty, positive psychologists have borrowed from other disciplines, namely philosophy and evolution.

The notion of having awe-like emotional responses while experiencing art, for example, dates back to the Irish philosopher, Edmund Burke, and his explanation of the *sublime*, which is defined as the feeling of having expanded thought that is inspired by literary and visual arts. It was Burke who advanced our knowledge of awe, highlighting two important properties a stimulus must possess to produce the sublime experience. From Burke's perspective the stimulus must be both powerful and obscure to produce such an experience. Positive psychologists Keltner and Haidt have elaborated on Burke's notions and have proposed a prototype of awe with two similar requirements: perceived vastness and accommodation.

Charles Darwin described admiration, an emotion closely related to awe, as a combination of surprise, pleasure, approval, and astonishment. Behavioral manifestations of admiration include open, bright eyes, raised eyebrows, and an open, smiling mouth. These behavioral manifestations are similar to those occurring while witnessing beauty or excellence in a given domain.

Although the scientific study of appreciation of art and beauty is still in its infancy (it is emerging), it is clearly a socially valued construct. Take for example

the Nobel Prize, which is an award given to appreciate excellence in a given domain that benefits society.

## **Development of Appreciating Beauty and Excellence**

It is likely that appreciation of art and beauty is a genetically linked strength, extrapolating on research connecting openness to experience as the most heritable of the Big Five personality traits. Because religious development is associated with feelings of awe, and is an exemplar of appreciating excellence, religious development may be useful to highlight as an example. It is likely that the emotional aspect of religion is more salient in adolescence than in childhood. Epiphanies are more common among adolescents and young adults, which is not surprising given the developmental trajectory that adolescence and young adulthood are times of appreciation because people are forming their own identities, value systems, and excellence. Thus, it is possible that the same developmental period is critical in the development of appreciating other types of beauty and excellence. It is also plausible that appreciation of certain types of excellence may require some kind of experience or expertise in a given area, therefore other character strengths such as curiosity and love of learning may overlap with appreciation of beauty and excellence.

Although some people equate appreciating beauty and excellence as fine things and associate that appreciation with snobbery, one does not have to have money to experience or appreciate beauty and excellence. What is perceived as excellence in dance, for one person may be observing a street dancer, and to another, Russian ballet. This notion is more clearly illustrated when the object of appreciation is a moral act. Appreciating moral excellence diminishes the perception of snobbery with aesthetic appreciation. It is one's noticing and appreciating excellence, not one's ability to afford excellence. Thus, this is a strength that is accessible to all, given that examples of beauty and excellence are plentiful, in all aspects of life. Given the accessibility to excellence, it is also possible to let people peak in their appreciation naturally through exposure or through interventions. Peterson and Seligman suggest exposing children to as many examples of excellence, providing guidance, and then letting it develop. It is important to nurture the experience of the activity, and not simply the activity. Examples of existing interventions include art therapy, music-based therapy programs, nature therapy, and religious retreats. Various institutions may facilitate appreciating excellence, including families, friends, schools, and specific clubs or activities (e.g., an art appreciation club), to name a few.

## **Measures**

There are no self-report measures that assess appreciation of beauty and excellence, or related emotions such as awe. This makes it difficult to discuss correlates. However,

some speculate that appreciation of art and beauty is related to openness to aesthetics, extroversion, gratitude, political liberalism, and negatively correlated with materialism.

SEE ALSO: ► Admiration ► Benefit finding ► Character strengths (VIA)  
► Open-mindedness ► Virtues

## Affective Forecasting

Laurie E. Wasko and Cynthia L. S. Pury  
*Clemson University*

*Affective forecasting*, or hedonic prediction, refers to the prediction of emotional reactions to future events, typically in terms of liking, enjoyment, and happiness. Affective forecasting has implications for decision making, in that it may influence the actual choice individuals make when faced with a decision point, and/or the subjective quality of the decision, post-choice. To the extent that individuals are accurate in their predictions, they may also be more likely to make good decisions (e.g., decisions that maximize gains and minimize losses), pursue goals that lead to happiness, and understand and interact effectively with others. As individuals face many decisions in their lifetime that are based on these future-oriented predictions, researchers have begun to identify and examine the mechanisms behind such forecasts, as well as the factors that influence their accuracy or inaccuracy.

## Overview of Affective Forecasting

Interest in the topic of affective forecasting began in the 1990s with the decision-making work of Kahneman and Snell. In their 1990 and 1992 work, the authors drew distinctions between various concepts of utility; specifically, they delineated *decision utility* (referring to the sign and weight given to an outcome in the context of a choice), *experienced utility* (the quality and intensity of an individual's actual affective response to an outcome), and *predicted utility* (an individual's beliefs regarding the experienced utility of a future outcome). The authors also proposed a research agenda, which suggested that in order to make an efficient or "good" decision (i.e., in order to establish a relationship between decision utility and experienced utility), individuals need to know what will be good for them (i.e., establish a relationship between predicted and experienced utility), and use that hedonic knowledge in a rational manner (i.e., establish a relationship between predicted and decision utility). Since that time, the concept of predicted utility (and subsequently affective forecasting, a particular type of predicted utility referring to predictions of hedonic states) has garnered additional theoretical and

empirical attention. Research on the topic has been conducted with multiple samples, ranging from college students to shoppers to hospital patients, regarding a variety of potential outcomes, including objects, behaviors, and circumstances associated with topics such as romantic relationships, sports, college classes, or medical operations, to name a few.

## Affective Forecasting Literature

Current research suggests that affective forecasts are typically made in terms of three predictive categories: the valence of the reaction (i.e., predicting a positive or negative reaction to an event), the intensity or strength of the reaction, and the duration of the reaction (how long the feeling will last). Although individuals are typically adept at predicting the first quality (whether an event will elicit a positive or negative reaction), they are less skilled at predicting the latter two; that is, people are relatively inaccurate when predicting the intensity and duration of their affective reactions. Although underestimation of intensity or duration is possible (e.g., when the individual is satiated or a need or want for the event is not salient), research generally shows that predictions of future like or dislike for an event or object more commonly result in an *overestimate* of the expected intensity and duration of that reaction. This overestimation has been termed *impact bias*, and multiple causes for this bias have been proposed. One proposed cause, the concept of *focalism*, states that overestimation is likely because when individuals are making these predictions they tend to overestimate how much the event in question will be considered and underestimate the influence and impact of additional future events. Impact bias may also be attributed to an individual's inclination to neglect his/her tendency to explain and make sense of a novel event (thereby decreasing the impact of that novel event), or to *immune neglect*, where an individual does not take into account the natural tendency to rationalize failure or misfortune. Lastly, there is evidence that impact bias may also be partly due to people's reliance on available but unrepresentative memories of the past. Research integrating predicted intensity and duration of reactions suggest that while individuals tend to predict intense reactions will last longer than non-intense affective reactions, the opposite is actually true; less-intense states may actually last longer than intense states. This means that when making a decision, individuals may choose options that seem more pleasurable, but are ultimately less satisfying.

Another vein of affective forecasting research examines the relationship between individual differences variables and accuracy in affective forecasting. This research suggests that there are certain types of people who tend to be more or less accurate in their affective forecasts. For example, components of emotional intelligence (EI) have been shown to account for variability in responses, as have additional individual difference variables such as optimism and impulsivity. Specifically, research suggests that EI is positively associated with accuracy in affective forecasts, while

impulsivity may be negatively related to accuracy. Additionally, individuals high in optimism may be more apt to exhibit a particular type of inaccuracy, namely overestimation of liking.

## Future Directions in Affective Forecasting

Research on affective forecasting is still in its early stages. Researchers are further delineating potential antecedents and consequences of accuracy (or inaccuracy) in these hedonic predictions, and the role that time (both *time course* and *temporal distance*) plays. Additionally, affective forecasting has examined prediction of only one of the three paths to life satisfaction proposed by Seligman – the pleasant life. Research has not, to date, examined predicted flow or meaningfulness of actions and it is unclear if the same phenomena will be seen in these areas. Integrating affective forecasting into this particular paradigm may be a fruitful framework for subsequent research.

SEE ALSO: ► Anticipatory enthusiasm ► Emotional intelligence  
► Hedonics ► Kahneman, Daniel ► Positive experiences

## Agency

Todd D. Little,<sup>a</sup> Theodore Walls,<sup>b</sup> and Lars-Erik Malmberg<sup>c</sup>

<sup>a</sup>University of Kansas; <sup>b</sup>University of Rhode Island; and <sup>c</sup>Oxford University

The concept of *agency* is fundamental to within-person developmental conceptions in positive psychology. Specifically, the idea that human behavior can be viewed as volitional due to either innate sources or experiential influences translates into a host of empirical questions about the sources, courses, and sequelae of agentic activity. Research hypotheses generated from various psychological theories regarding agentic characteristics and behaviors are testable and broadly supported in diverse contemporary psychological literatures. Outside positive psychology the agency concept has been used similarly, for example in the Leontiev- and Vygotsky-inspired sociocultural activity theory, and in sociology to distinguish between individual agency and social structure.

The agency concept is unique in that it is defined by the interplay between a person and the action space surrounding him or her – it is not only about how people think and feel about whether they pursue certain actions, but also about whether they actually do pursue them and the correspondence of the two over time. A primary tenet of agency-related concepts is the notion that individuals actively shape their developmental course and influence their environment. At the same time, environments are seen as exerting a reciprocal influence that can either hinder or bolster the agentic activity of the individual. In this sense, work within



the broader agency paradigm has firm epistemological roots in early contributions to action research, such as Lewin's field theory.

The agency concept and research on action go hand in hand. Because positive psychology focuses on ways in which peoples' choices can be viewed as rational and constructive, the agency-action family of constructs provides a very useful foundation for the consideration of intraindividual functioning. Agency-action ideas are found in numerous contemporary concepts that include action-control, perceived control, self-efficacy, self-determination, behavioral self-regulation, goal-directed behavior, and intrinsic motivation.

A sense of personal agency involves the sources of volition for, and mechanisms by which, one formulates, pursues, and regulates actions in progressing toward a goal. Theories of agency either implicitly or explicitly use concepts of action to describe behavior. Many historical theorists have utilized related concepts to describe behavior. The origins of the agency concept can be found in the seminal ideas of many of the early theorists in psychology such as Heider, Lewin, and Piaget. From a general agency perspective, behavior is conceptualized as goal-directed actions. From an agency perspective, the key characteristics of actions include that:

- they arise from both biological and psychological needs;
- they are directed toward self-regulated goals that service the biological and psychological needs, both short-term and long-term;
- they are governed by one's personal knowledge about the links among agents, means, and ends and by behaviors that entail self-chosen forms and functions;
- they give rise to self-determined governance of behavior and development, which can be characterized as hope-related individual differences;
- they are triggered, executed, and evaluated in contexts that provide supports and opportunities, as well as hindrances and impediments to goal pursuit; and
- their outcomes and consequences are interpreted in contexts that vary according to norms, social structure, and systemic features.

Although psychological inquiry into the agency and action is somewhat fragmented, they all share the organismic meta-theoretical perspective. The organismic perspective views the origins of behavior as emanating primarily from within the individual. Hence, behavior viewed as volitional and goal-directed action. All agency theories share the idea that individuals are inherently active and self-regulating in their goal pursuits and that their actions are both purposive and self-initiated. In terms of development, individuals actively follow a predominantly self-guided path, giving form and meaning to their actions along the way. That is, individuals are seen as active agents who plot and navigate a chosen course through the uncertainties and challenges of the social and ecological environments. A key element of being an active agent (i.e., being agentic) is that individuals engage in self-evaluative feedback processes that allow them to interpret and evaluate the effectiveness of their actions and the consequences of their actions. As a result of this active evaluative process, individuals are able to discover and refine their goals

and their personal knowledge of what it takes to achieve goals and whether they are able to utilize or execute effective actions to achieve their goals.

An exemplar of organismic theorizing is the work of Piaget. A number of basic elements of Piaget's theories are central to the study of agentic action. For example, his ideas about the processes by which learning occurs, such as equilibration, are fundamental to how individuals mature in their ability to plan and execute increasingly advanced actions. His description of internalized egocentric speech is critical to understanding how lasting beliefs relating to action may be formed. His positioning of the person as an actor in a system of interactions with the world who actively constructs understanding provides a basis for understanding how individuals might become purposive over the lifespan. In addition, Piaget's assertion that cognitive capacities are part of a *structure d'ensemble* (structure of the whole) is also influential in consideration of agency. The split between domain generality of cognitive capacities on the one hand and domain specificity of these capacities on the other can be seen in current inquiry into action in that certain types of action-related beliefs are thought to be domain specific and others are not.

The last decade has seen the emergence of several progressive attempts to develop a more comprehensive theory for the operation of personality-based motivational profiles. Emerging strands of inquiry in this area include the relationship of early experience to later agentic behavior and the consolidation of a range of agency and self-efficacy conceptions into an interrelated family of constructs with relevance in different contexts and life periods. A range of empirical applications have been pursued under the construct in several international settings, including Russia, China, throughout Europe, and the US. These have led to extensive construct validation, characterization of the developmental course of agency in various populations, and provided provocative underpinnings for new directions in applied settings such as education and youth programming.

SEE ALSO: ► Attribution theory ► Goals and goal-setting theory ► Hope  
► Intentional self-development ► Locus of control

## Agreeableness

Michelle N. Shiota and Elaine Perea

*Arizona State University*

*Agreeableness*, which reflects a consistently warm, prosocial, non-aggressive orientation toward others, is one of the Big Five dimensions of human personality uncovered by factor analyses of trait ratings in several languages and cultures. Like the other Big Five constructs, agreeableness is a higher order statistical factor reflecting a pattern of intercorrelation among a number of more specific traits, in this case involving an individual's approach to interpersonal relationships.

Agreeableness appears to be a lifelong aspect of personality in that one's level of agreeableness relative to others tends to remain consistent over long periods of time, although people typically do become somewhat more agreeable as they age.

## Measures of Agreeableness

Agreeableness is typically measured along with the other Big Five factors using questionnaires, in which the respondent rates his or her level of agreement with items describing the self or another target person. Because the Big Five personality factors were actually derived from studies examining correlations among items rated in this way, the items on Big Five questionnaires help to convey the content of each construct. The best known and most comprehensive Big Five questionnaire is Costa and McCrae's NEO Personality Inventory-Revised (NEO-PI-R); "NEO" represents the factors Neuroticism, Extraversion, and Openness to Experience, although these words are not used explicitly in the title. In this instrument, respondents rate 240 single-word adjectives dichotomously as true of the target or not true of the target. Factor scores are computed by weighting each item according to a schedule included in the NEO-PI-R manual. The Agreeableness scale of the NEO-PI-R has six eight-item subscales, or facets: Trust, Straightforwardness, Altruism, Compliance, Modesty, and Tender-Mindedness. John, Kentle, and Donahue's Big Five Inventory, a 44-item questionnaire derived from the NEO-PI-R adjectives, but framing each in a longer phrase and using a five-point response scale anchored at 1 (*disagree strongly*) and 5 (*agree strongly*), is also frequently used by personality and social psychology researchers (sample items in Box 1 reprinted from Benet-Martinez & John, 1998).

### Box 1. Sample Agreeableness Items from the Big Five Inventory.

*I see myself as someone who:*

- is helpful and unselfish with others
- tends to find fault with others (reverse scored)
- has a forgiving nature
- is generally trusting
- can be cold and aloof (reverse scored)
- is considerate and kind to almost everyone

Agreeableness can also be reliably measured using other instruments widely used in personality and clinical research, such as the Adjective Check List, the California Q-set, and some subscales of the MMPI. Questionnaire measures of agreeableness and the Big Five are usually used as self-report instruments, but high agreement

between self-ratings and ratings by close others, such as spouses, romantic partners, and friends, suggest both that people can accurately report their own agreeableness, and that agreeableness is consistently manifested in behavior observed by others. Also, perhaps surprisingly, findings from “round robin” studies (in which participants rate several interaction partners as well as themselves) suggest that self-report measures of agreeableness show fairly little contamination by self-enhancement or social desirability concerns.

## **Implications of Agreeableness**

The apparent universality of agreeableness as a dimension of personality, and its ease of measurement using self-report questionnaires, have encouraged a wide body of research on the correlates of this trait. Greater agreeableness is associated with higher levels of overall psychological well-being, typically defined as high positive affect, low negative affect, and high life satisfaction. Recent research suggests that agreeableness predicts more frequent and intense experience of positive emotions in close relationships, such as love and compassion, but not necessarily positive emotions associated with reward acquisition, high social status, or information processing.

One hallmark of high agreeableness is low experience of anger and expression of hostility, emotional implications that may explain why high agreeableness is associated with reduced vulnerability to cardiovascular disease. People high on agreeableness are more likely to engage in prosocial and altruistic behavior, and are generally well-liked and respected. The marriages of people high on agreeableness are likely to be happier and more stable than those of people low on this factor, with both husbands’ and wives’ agreeableness independently predicting marital satisfaction.

Although agreeableness is primarily thought of as a social disposition, it has practical implications as well – high agreeableness predicts stronger job performance, especially in jobs requiring frequent interaction or collaboration. In terms of mental health, high agreeableness is associated with lower risk of alcoholism and depression, and agreeableness scores are negatively correlated with measures of antisocial, narcissistic, and paranoid personality disorders.

## **Future Directions**

After decades spent documenting the validity of the Big Five constructs and the reliability of instruments used in their measurement, researchers have recently turned to investigating the underlying causes of individual differences in the Big Five factors. Because Big Five dispositions seem to appear so early in life, and remain so consistent over the lifespan, genetic and other biological markers are of particular interest.

There is evidence that genes play some role in agreeableness. One behavioral genetics study examining agreeableness scores of identical and fraternal twins concluded that 41% of the variance among individuals in this factor was due to genes. However, a similar study concluded that only 12% of the variance in agreeableness was due to genetic influence, with the twins' shared environment accounting for 21% of variance. Differences among study findings may be due to use of different measures, samples from different regions, different statistical approaches, and a host of other study features, so controversy over the heritability of agreeableness will require considerably more research to resolve. At least one specific gene is believed to be associated with agreeableness – the 5-HTTLPR gene, encoding proteins involved in central nervous system serotonin transport. Researchers found that participants low on agreeableness were more likely to be homozygous for the 5-HTTLPR-*short* allele than heterozygous or homozygous for the corresponding -*long* allele, suggesting that high agreeableness may in part reflect more efficient serotonin transport. The effect size was small, however, and it is likely that multiple genes combine to influence this trait.

There is also increasing interest in the neuroanatomical correlates of agreeableness. One study found that higher agreeableness was associated with greater right and smaller left orbitofrontal cortex volumes of patients with frontotemporal dementia – a neurodegenerative disease in which severe deficits in empathy and intimacy are often noted. Because of the emerging interest in the biological markers of agreeableness, researchers are beginning to examine evidence of this factor in other mammals, considering the evolutionary origin of this factor and its importance in mammalian survival and reproductive fitness.

SEE ALSO: ► Altruism ► Five factor model ► Kindness

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## Allport, Gordon W.

Richard I. Evans  
*University of Houston*

Gordon Allport is regarded as one of the major figures in the history of psychology. Interestingly, Allport began his academic career as an English professor and was perhaps influenced by his older brother Floyd Allport, who became a

significant figure in the history of social psychology (completing one of the early texts in the field of social psychology).

Allport went on to complete a PhD in psychology. Among his significant contributions were his delineation of personality traits (e.g., common and cardinal), completing a still widely read text in the psychology of personality, his classic works on the nature of prejudice and discrimination, his widely utilized measure (with Vernon) of human values, and his examination of the profound existential anxiety suffered by those who were interned in Nazi concentration camps (many of whom he personally interviewed). These interviews revealed to Allport that many of those who survived were able to maintain some semblance of a positive outlook and not succumb to the depressing cynicism that was so likely to be induced in such horrible circumstances. Allport also countered some of the cynicism expressed in particular aspects of psychoanalysis by his refreshing optimism and faith in self-determinism of the individual reflected in his many articles and books. Furthermore, he mentored a group of American psychologists as a professor at Harvard who in their distinguished careers have carried on in their publications Allport's positive assessment of the individual and his or her potential for self-development.

My first contact with Allport was in the 1950s when he expressed an interest in my dissertation, "Personal Values as Factors in Anti-Semitism," for referencing in his forthcoming book, *The Nature of Prejudice*, a work that became a classic in the study of prejudice. This book remains an unmatched analysis of the root causes of prejudice and discrimination, but he concluded that only through an increasingly more positive perspective on the issue and through research-supported legislation would prejudice diminish over the years.

Allport's positive psychology was reflected in his interaction with students and colleagues and, of course, in his many publications and lectures. Some examples of this are that his belief that growth and socialization should incorporate a positive, future-directed optimism. Even while battling cancer, he scoffed at the notion of preoccupation with existential anxiety that was the fashion to discuss during the period of his later life. He died shortly after the biography *Gordon Allport: The Man and His Ideas* was published.

SEE ALSO: ► Labeling (positive effects) ► Positive law and policy  
► Self-determination ► Stereotype threat

## Altruism

David A. Lishner<sup>a</sup> and E. L. Stocks<sup>b</sup>

<sup>a</sup>University of Wisconsin, Oshkosh; <sup>b</sup>University of Texas at Tyler

For centuries, altruism has spurred debate among philosophers and great thinkers including Plato, Aristotle, Machiavelli, Hobbes, Mill, Nietzsche, Hume, Smith, and

Kant. More recently, altruism has become a focus of scientific inquiry. At issue are the following questions: What is altruism? Does it exist among humans? If so, what are the origins of altruism, and what implications does altruism hold for our understanding of the human condition?

## Defining Altruism

The term *altruism* is used to describe two distinct phenomena. The first is *behavioral altruism*, which refers to helping behavior that is either very costly to the helper or conveys no self-benefit for the helper. The second is *psychological altruism*, which refers to a motivation to increase the welfare of another as an end in itself. Although the latter definition is commonly used among psychologists and philosophers, the former is popular among researchers who study non-human animals.

### Behavioral Altruism

Altruism is often attributed to individuals who help others while incurring either high cost or no benefit to themselves. In this case, altruism is a form of behavior and related consequences rather than a motivational state. Although behavioral altruism appears most relevant to analyses of human behavior, it has been observed in many organisms. Ethological examples of high-cost helping are found in organisms with no mental structure (amoebas) as well as those with relatively complex mental structure (nonhuman primates).

### Psychological Altruism

Another view of altruism involves consideration of the intentions or motives of an individual. Thus, altruism is determined not by the consequences of behavior, but rather by a motive to benefit another individual. This notion of psychological altruism is often contrasted with *psychological egoism*, which is a motivational state in which the goal is to benefit oneself. Proposing the existence of psychological altruism logically does not preclude the existence of psychological egoism or vice versa because both may operate in the same situation.

### Contrasting Behavioral and Psychological Altruism

It is important to note that defining altruism in behavioral terms carries with it certain limitations. For example, helping is usually costly at some level, which makes it difficult to decide how much cost must accrue before categorizing a helping response as altruism. Also, two individuals may engage in the same behavior but for very different reasons. Consider the following examples: Person A helps because she expects to receive self-benefit for helping, but receives none. Person B helps without expecting self-benefit, but nonetheless benefits. If one applies a

behavioral definition of altruism, then Person A's helping would be classified as altruism whereas Person B's helping would not. However, if one applies a motivational definition of altruism, these labels would be reversed. The disjoint between these two uses of the term altruism raises several important issues. First, psychological altruism may occur regardless of whether the consequences of helping are beneficial or costly to the helper. Second, psychological altruism may co-occur with other nonaltruistic motives (e.g., psychological egoism), and these motives can guide behavior jointly. Third, behavioral altruism may occur even if one is not altruistically motivated. Both psychological altruism and psychological egoism, operating either alone or in combination, can result in behavioral altruism.

## **Does Psychological Altruism Exist?**

Although the existence of behavioral altruism is not in dispute, there is much debate as to the existence of psychological altruism. Because psychological altruism refers to an internal psychological process, it cannot be easily verified by focus on a single instance of helping. People may benefit others for a variety of nonaltruistic reasons, and the consequences of helping typically provide little insight into the underlying motives for helping. For these reasons, psychologists have attempted to determine if psychological altruism exists by examining patterns of helping behavior in carefully controlled experiments.

### **The Empathy-Altruism Hypothesis**

Before one can test whether patterns of behavior reflect the existence of psychological altruism, one must first isolate potential causes of this motive. Based on numerous published studies that demonstrate an association between empathy and helping behavior, C. D. Batson proposed the empathy-altruism hypothesis. According to this hypothesis, feeling empathy for a person in need evokes an altruistic motive to increase that person's welfare. Here, *empathy* is defined as a vicarious emotional state congruent with the perceived welfare of another. Although a number of empathic emotions likely exist (e.g., empathic joy, empathic anger, empathic shame, etc.), the emotional response at issue in the empathy-altruism hypothesis is best captured by emotion words such as compassion, tenderness, softheartedness, and sympathy.

### **Egoistic Alternatives to the Empathy-Altruism Hypothesis**

Not everyone is convinced that altruism exists, and a number of egoistic alternative explanations have been proposed to explain the association between empathy and helping. These egoistic explanations fall into three general groups, each defined by the specific type of egoistic motive that empathy may evoke. These explanations



encompass the following classes of egoistic self-benefits: (1) aversive-arousal reduction; (2) reward attainment; and (3) punishment avoidance.

Aversive-arousal reduction explanations propose that feeling empathy is unpleasant, and individuals are motivated to reduce or avoid this unpleasant state. According to this explanation, empathy leads to helping behavior when it provides the only way to reduce or avoid feeling empathy. However, helping behavior will not occur if a less costly means of reducing empathy is available (e.g., escaping the situation). Reward-attainment explanations propose that people are socialized to associate empathy with potential self and social rewards that accompany the act of helping. As such, empathically-aroused individuals help in order to feel good about themselves or to elicit approval or respect from others. Finally, punishment-avoidance explanations propose that people are socialized to associate empathy with self-administered and social punishments for failing to help. Thus, empathically-aroused individuals help in order to avoid guilt, shame, or social punishments such as censure from others, social rejection, legal liability, and the like.

To date, over 25 experiments have tested these different classes of egoistic explanations against the empathy-altruism hypothesis. In these experiments, researchers manipulated the ease of acquiring various egoistic goals and then examined who among those feeling relatively high levels of empathy (compared to those feeling relatively low levels) opted to help, even when doing so prohibited the individual from obtaining these egoistic goals. With few exceptions, these experiments supported the empathy-altruism hypothesis over each class of egoistic explanation. Although the weight of the evidence strongly favors the empathy-altruism hypothesis, some debate still exists regarding the tenability of the empathy-altruism hypothesis.

## The Origins of Altruism

### The Origins of Behavioral Altruism

A number of evolutionary explanations exist for why organisms help one another. One popular explanation is *kin selection*, which proposes that helping kin increases the reproductive success of individuals who share the helper's genes. Consequently, behavioral altruism toward kin will evolve in a species when those who help their kin are reproductively more successful than are individuals who do not help their kin. It is important to note that most versions of this explanation assume that natural selection operates at the level of the gene, a position that many evolutionary biologists find controversial.

A second explanation for behavioral altruism is *reciprocal benefit* (sometimes called *reciprocal altruism*). Reciprocal benefit may account for behavioral altruism among kin as well as nonkin, including members of different species. According to this explanation, helping behavior evolves in species when helpers are reproductively more successful than are nonhelpers. Advocates of reciprocal benefit

argue that psychological mechanisms responsible for friendship, gratitude, empathy, and the like may stem from reciprocal benefit.

Both kin selection and reciprocal benefit involve natural selection at the level of the individual (and possibly, at the level of the gene). However, some evolutionary biologists have revisited Darwin's suggestion that natural selection may also operate at the group level. Under certain circumstances, groups whose members engage in relatively high levels of costly helping may out-compete groups whose members engage in relatively low levels of costly helping. When this occurs, group selection may promote the species-wide emergence of mechanisms responsible for behavioral altruism.

When considering the role these three evolutionary processes may play in the development of behavioral altruism, it is important to note that natural selection likely affects organisms in multiple ways and at multiple levels, including at the level of the individual and of the group. Thus, it is possible that kin selection, reciprocal benefit, and group selection may foster the development of behavioral altruistic mechanisms either alone or in combination with one another. Within a species, the degree to which the capacity for behavioral altruism emerges will depend on the nature of the environmental pressures that face the species. Depending on these environmental pressures, a species may follow an evolutionary trajectory that involves the formation of mechanisms that provide relatively high levels of behavioral altruism, relatively low levels of behavioral altruism, or a balance between the two.

### The Origins of Psychological Altruism

As discussed earlier, research suggests that humans have the capacity for psychological altruism. If this capacity does exist, from where does it originate? One possibility is that the capacity for psychological altruism is a consequence of developmental learning. A second possibility is that natural selection favored the emergence of innate emotional and motivational systems that evoke psychological altruism for those who contribute to reproductive success, such as kin, close others, or ingroup members.

Recall that much of the evidence for psychological altruism comes from experiments. In the majority of these experiments, participants directed their helping behaviors toward strangers, who are unlikely to promote reproductive success. These findings suggest that psychological altruism can generalize to a wide range of targets, which seems to favor a learning-based explanation over one that includes only innate, target-sensitive mechanisms derived from natural selection. However, much of the evidence for psychological altruism comes from tests of the empathy-altruism hypothesis, which claims that empathic feelings are a source of psychological altruism. The nature of the empathy examined in this research reflects tender feelings – feelings that people are likely to experience for young children, infants, and other vulnerable individuals. Thus, it is possible that psychological altruism arises from the generalized activation of innate

emotional and motivational mechanisms that evolved to promote parental care of offspring.

The suggestion that psychological altruism derives from parental care mechanisms is not new. One implication of this assertion is that natural selection did not endow humans with the capacity for psychological altruism toward adult close others and strangers. Rather, this capacity arises from the interaction of evolved emotional and motivational parental care mechanisms with the human capacity for complex and flexible cognitive-perceptual processing. As the individual develops throughout his or her lifespan, an increased capacity for recognizing and understanding vulnerability allows activation of parental care systems in response to a wide variety of vulnerable targets (e.g., young children, adults in immediate need, adults with chronic need).

## **Implications of Psychological Altruism and Directions for Future Research**

The assumption that psychological altruism exists carries with it a number of important implications. First, it becomes necessary to disentangle the motivational basis of human prosocial behavior, and to recognize the distinction between altruistic motivation and prosocial behavior. The awareness that another is in need can elicit not only psychological altruism, but also a variety of prosocial egoistic motives (e.g., desire to obtain rewards for helping and to avoid punishments for not helping) as well as non-prosocial egoistic motives (e.g., desire to avoid the costs of helping). The behavioral outcome that results will therefore reflect a blend of these various motives, all of which may operate in a congruent manner or in conflict with one another. For example, research suggests that psychological altruism can lead individuals to help another, even when doing so harms others or is otherwise immoral. Thus, psychological altruism may lead to great acts of compassion, but it may do so at the expense of others, or at the expense of certain moral principles.

Although psychological altruism may conflict with other prosocial motives, it may also reinforce such motives. For example, altruistic motivation to increase the welfare of a victim of injustice may promote the desire to uphold principles of justice more generally. Similarly, altruistic desire to improve the welfare of a member belonging to a disadvantaged group may spur desire to improve the welfare of the disadvantaged group as a whole. Thus, it becomes important to consider how psychological altruism in combination with other prosocial motives can energize stronger, more widespread forms of prosocial behavior.

Because helping always is costly, a second implication of psychological altruism is that it may compel individuals to incur high levels of cost in order to increase the welfare of others. Thus, if successful helping is anticipated to involve high cost, individuals may attempt to avoid emotions that lead to psychological altruism, such as empathy. Empathy, and consequently psychological altruism, may also be

avoided when increasing or improving the welfare of the individual is impossible. Research suggests that an inability to satisfy an altruistic motive leads to negative affect. One implication of this finding is that empathy burnout may result from exposure to repeated situations in which helping is perceived as costly, taxing, or impossible (e.g., long-term care situations). With empathy burnout, individuals become disengaged from the needs of other, a response that may stem in part from active empathy avoidance.

Finally, future research should examine other ways in which psychological altruism manifests itself besides overt helping behavior. For example, research suggests that psychological altruism sometimes produces decreased helping if helping is perceived as undermining the long-term welfare of the individual. As this example suggests, the goal of psychological altruism is perhaps best conceptualized as *promoting and protecting* the welfare of another individual rather than as *increasing or improving* his or her welfare. Furthermore, psychological altruism may lead one to adopt a more caring and supportive communication style and become more vigilant of threats to the needs, goals, and values of vulnerable others.

SEE ALSO: ► Close relationships ► Empathy

## Amae

Michelle N. Shiota

*Arizona State University*

*Amae* is a Japanese emotion term, defined by Doi as “a sense of helplessness and the desire to be loved” (1963, p. 266) in which one is able to “depend or presume upon another’s benevolence” (Doi, 1962, p. 145). Although the term *amae* is Japanese, and *amae* is often described by anthropologists and cultural psychologists as a Japanese emotion because of its central role in that society, Doi describes it as a universal response to being cared for by a trusted other. According to Doi, the prototypical experience of *amae* is an infant’s love for its mother.

This definition, and the prototype of the infant’s feelings toward its mother, suggest a link to the wide body of Western research on psychological attachment – the process by which infants seek proximity to primary caregivers, protest against separation from them, and turn to them when in danger or need. According to John Bowlby, such attachments serve the functions of ensuring the infant’s protection in the face of danger or illness, and providing a secure base from which the infant can explore his or her environment. Recent years have seen acknowledgement of the role of psychological attachment in adult relationships as well, especially in the context of romantic relationships and marriage. Likewise, although the prototypical experience of *amae* is that of an infant toward its mother, *amae* as described by Doi can also be felt toward a spouse or romantic partner, an intimate friend, or any other person in whom one trusts and is able

to depend. In both infant and adult romantic attachment, the availability of a secure attachment figure appears to alleviate one's physiological and behavioral response to stressful situations. In the absence of immediate stressors, secure attachment helps facilitate successful engagement with the world outside the relationship as well.

In Western cultures a negative connotation is often placed on depending on others, and excessive dependence is considered a negative trait. Amae in Japan has a positive connotation, however – the acknowledgement that in the context of intimate romantic or family relationships, it is appropriate, desirable, and pleasurable to depend on others' assistance. Doi suggests that amae is encouraged excessively by Japanese culture and discouraged excessively by American culture, probably to the detriment of both societies. Feeling and displaying amae need not imply giving up control in the relationship. Studies suggest that both Japanese and Americans feel that a person asking a close friend for favors has as much control as the friend granting the favor. Relationships in which one feels amae are distinguished by the lack of need for explicit gratitude or reciprocity, in that one is entitled to caregiving and nurturance from this person, and in receiving it one incurs no obligation or debt.

In the past decade, amae has been of increasing interest to Western emotion researchers studying emotions in intimate relationships. Recent studies suggest that American undergraduate students can relate to the concept of amae in relationships, experiencing more positive emotion and inferring greater relationship intimacy when a friend asks a somewhat imposing favor of them than when the friend pays another person to perform the task, or asks a third friend to do it. The experience of amae has been elicited experimentally by asking research subjects to describe a time when others took care of them, or by having them read a scenario in which close friends take care of the subject while he or she is ill. The Dispositional Positive Emotion Scale, a self-report instrument measuring the trait experience of several positive emotions, includes an attachment love subscale appropriate for measuring dispositional amae. However, no English-language measures of the state experience of amae are currently available, and the term does not translate accurately into any single word in that language. Little is known about the cognitive or behavioral implications of state amae in adults, or about the process by which amae/attachment relationships develop between adults.

Researchers are also increasingly interested in finding physiological markers of amae, or love for caregivers. The neurohormone oxytocin is believed to facilitate the development of pair bonds in some mammalian species after mating, and may be involved in the initial formation of other attachments. The role of oxytocin in the state experience of amae is still unknown; however, oxytocin can be released in response to pleasant social touch, and oxytocin has been proposed as the mechanism by which social support facilitates physical health in the face of stress. Reunion with loved ones may also trigger the activity of beta-endorphins, neurotransmitters known to mediate tranquility and the reduction of physical pain. Studies with

several species of mammals suggest that beta-endorphin activity is reduced when animals are separated from attachment figures, but the role of endorphins in positive emotion associated with reunion and the receipt of another's care are still unclear.

SEE ALSO: ► Adult attachment security ► Attachment theory  
► Collectivism ► Intimacy ► Positive emotions

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## American Psychological Association

Carol Williams-Nickelson and David W. Nickelson

*American Psychological Association*

The American Psychological Association (APA) is the largest scientific and professional organization representing psychology in the United States and is the world's largest association of psychologists. APA's membership includes more than 150,000 researchers, educators, clinicians, consultants, and students.

The APA was founded at Clark University in 1892 with the goal of advancing psychology as a science. After beginning as an academically focused organization, APA reorganized in 1945 to include several smaller psychological organizations, evolving into a new organization with a mission that included both professional and scientific issues, as well as the application of psychology to the public interest. Over time, a multifaceted structure that included divisions and state, provincial and territorial psychological associations developed, reflecting the diversity of the field and the APA's members. The APA was incorporated in 1925 in Washington, DC, where it remains headquartered. Currently, the APA has over 600 employees, publishes a number of highly respected journals, has a well regarded book publishing function, holds an annual convention attended by 12,000–17,000 people, provides a monthly magazine to members, supports numerous volunteers serving on the APA's Boards and Committees, and houses multiple offices to address a variety of issues with the goal of advancing psychology as a science and profession in the legislative, public, academic and research arenas.

Through its divisions in 54 subfields of psychology, affiliations with 59 state, territorial, and Canadian provincial associations, and complex governance and

central office infrastructures, the APA works to implement its mission. That is, the APA advances psychology as a science and profession and as a means of promoting health, education, and human welfare by:

- the encouragement of psychology in all its branches in the broadest and most liberal manner;
- the promotion of research in psychology and the improvement of research methods and conditions;
- the improvement of the qualifications and usefulness of psychologists through high standards of ethics, conduct, education, and achievement;
- the establishment and maintenance of the highest standards of professional ethics and conduct of the members of the Association; and
- the increase and diffusion of psychological knowledge through meetings, professional contacts, reports, papers, discussions and publications,

thereby to advance scientific interests and inquiry, and the application of research findings to the promotion of health, education, and the public welfare.

## **Membership**

APA members are primarily doctoral-level psychologists, about a third of whom are employed in educational settings, a third in private clinical practice, and a third in other settings such as hospitals, clinics, business, industry, and government. Affiliates comprise about one-third of the APA's total membership and include graduate students, high school teachers of psychology, master's level mental health professionals, psychologists in other countries, and others.

## **Divisions**

The APA's 54 divisions also offer memberships for psychologists, students, and others who share similar interests. Divisions range in size from 300 to 7,500 members and affiliates. Each focuses on a different substantive area of psychology by offering a newsletter, sometimes a peer-reviewed journal, programming at the annual APA convention and other opportunities for their members to share information and advance their area of psychology. The APA divisions were established in 1945. Early on, Division 4 was set aside for the Psychonomic Society; however, the society decided to remain separate from APA. Similarly, Division 11 was set aside for Abnormal Psychology and Psychotherapy. These groups decided that they fit with the Society of Clinical Psychology (Division 12) and did not need to be identified in a separate division. For historical purposes, Divisions 4 and 11 have remained vacant. The current APA divisions include the following:

- 1 Society for General Psychology
- 2 Society for the Teaching of Psychology
- 3 Experimental Psychology
- 4 There is no Division 4
- 5 Evaluation, Measurement, and Statistics
- 6 Behavioral Neuroscience and Comparative Psychology
- 7 Developmental Psychology
- 8 Society for Personality and Social Psychology
- 9 Society for the Psychological Study of Social Issues (SPSSI)
- 10 Society for the Psychology of Aesthetics, Creativity, and the Arts
- 11 There is no Division 11
- 12 Society of Clinical Psychology
- 13 Society of Consulting Psychology
- 14 Society for Industrial and Organizational Psychology
- 15 Educational Psychology
- 16 School Psychology
- 17 Society of Counseling Psychology
- 18 Psychologists in Public Service
- 19 Society for Military Psychology
- 20 Adult Development and Aging
- 21 Applied Experimental and Engineering Psychology
- 22 Rehabilitation Psychology
- 23 Society for Consumer Psychology
- 24 Society for Theoretical and Philosophical Psychology
- 25 Behavior Analysis
- 26 Society for the History of Psychology
- 27 Society for Community Research and Action: Division of Community Psychology
- 28 Psychopharmacology and Substance Abuse
- 29 Psychotherapy
- 30 Society of Psychological Hypnosis
- 31 State, Provincial, and Territorial Psychological Association Affairs
- 32 Humanistic Psychology
- 33 Mental Retardation and Developmental Disabilities
- 34 Population and Environmental Psychology
- 35 Society for the Psychology of Women
- 36 Psychology of Religion
- 37 Society for Child and Family Policy and Practice
- 38 Health Psychology
- 39 Psychoanalysis
- 40 Clinical Neuropsychology
- 41 American Psychology-Law Society
- 42 Psychologists in Independent Practice
- 43 Family Psychology



- 44 Society for the Psychological Study of Lesbian, Gay, and Bisexual Issues
- 45 Society for the Psychological Study of Ethnic Minority Issues
- 46 Media Psychology
- 47 Exercise and Sport Psychology
- 48 Society for the Study of Peace, Conflict, and Violence: Peace Psychology  
Division
- 49 Group Psychology and Group Psychotherapy
- 50 Addictions
- 51 Society for the Psychological Study of Men and Masculinity
- 52 International Psychology
- 53 Society of Clinical Child and Adolescent Psychology
- 54 Society of Pediatric Psychology
- 55 American Society for the Advancement of Pharmacotherapy
- 56 Trauma Psychology

## **Organizational Structure**

The APA is a corporation chartered in the District of Columbia. As such, the certificate of incorporation determines and limits the APA's activities to those primarily in the service of promoting psychology in the public interest as an educational entity. The charter takes precedence over all of APA's internal documents, including the APA Bylaws.

The APA Bylaws serve as the APA's constitution and take precedence over all other internal rules. They can only be amended by vote of the membership. They have remained fundamentally unchanged since they were ratified by the members a half-century ago. The bylaws establish the major structural units of APA: the Council of Representatives, the Board of Directors, the officers, the standing boards and committees, and the central office with a chief executive officer.

APA members hold the ultimate power within the Association and exercise their power through direct vote and through the election of members to serve on the Council of Representatives and as APA President-elect. The primary constituencies from which the representatives are elected are the divisions and the state, provincial and territorial psychological associations. The number of seats on the Council of Representatives allocated to a division or state/provincial/territorial association is based on an annual apportionment ballot, whereby each member of the Association may allocate a total of ten votes to the division(s) and/or state/provincial/territorial association(s) through which they wish to be represented the following year. Council representatives from divisions and state/provincial/territorial associations are required to be members of the division or state/provincial/territorial associations they represent, as well as members of the Association. The Council of Representatives elects six of its members to serve along with the elected APA officers (president, past-president, president-elect, treasurer, recording secretary and chief executive officer), as a 12-person Board of Directors

to manage the affairs of the Association, subject to the periodic approval of the Council. All voting members of the Board of Directors are elected for a three-year term. Board members-at-large, the Recording Secretary and the Treasurer are nominated and elected by the previous year's Council. The APA President-elect is nominated and elected by APA Fellows, Members, and Voting Associates. The presidency cycle is 3 years, with one year each of service as President-elect, President and Past President. The President chairs both the Council of Representatives and the Board of Directors. The Chair of the American Psychological Association of Graduate Students (APAGS) serves as a voting member of Council and a non-voting member of the Board of Directors.

The Council of Representatives has broad authority to develop the policies of the Association, within the framework of the charter and the bylaws. It has full authority over the affairs and funds of the Association.

## **Governance, Boards, and Committees**

Much of the work of the Association is completed by member volunteers who serve on the APA's various Boards and Committees. These groups report to the Council of Representatives, the APA's most powerful governance group which is charged with the responsibility of setting policy and establishing priorities for the Association. Boards and Committees carry out a wide range of tasks and represent many interests of the APA's members and the field. Positions on the APA's Council, Boards, and Committees are filled through a process of electing eligible APA members and in some cases, affiliates. The APA Boards and committees include the following:

- Board of Directors
- Policy and Planning Board
- Committee on Structure and Function of Council
- Board for the Advancement of Psychology in the Public Interest
- Board of Convention Affairs
- Board of Educational Affairs
- Board of Professional Affairs
- Board of Scientific Affairs
- Election Committee
- Ethics Committee
- Finance Committee
- Membership Committee
- Publications and Communications Board
- Agenda Planning Group
- Commission for the Recognition of Specialties and Proficiencies in Professional Psychology
- Committee for the Advancement of Professional Practice

- Committee for the American Psychological Association of Graduate Students
- Committee on Accreditation
- Committee on Aging
- Committee on Animal Research and Ethics
- Committee on Children, Youth, and Families
- Committee on Disability Issues in Psychology
- Committee on Division/APA Relations
- Committee on Early Career Psychologists
- Committee on Ethnic Minority Affairs
- Committee on International Relations in Psychology
- Committee on Lesbian, Gay, and Bisexual Concerns
- Committee on Professional Practice and Standards
- Committee on Psychology Teachers at Community Colleges
- Committee on Psychological Tests and Assessment
- Committee on Rural Health
- Committee on Scientific Awards
- Committee on Women in Psychology
- Continuing Professional Education Committee
- Council of Editors
- Education and Training Awards Committee
- Teachers of Psychology in Secondary Schools

The APA Ad Hoc Committees and Task Forces are formed to address time-limited or newly identified issues that are important to APA members and to psychology in general. Some examples of these include:

- Ad Hoc Committee on Films and Other Media
- Ad Hoc Committee on Legal Issues
- Advisory Committee on Colleague Assistance
- Task force on Research Regulations
- History Oversight Committee
- Joint Committee on Testing Practices
- Task Force on Serious Mental Illness/Severe Emotional Disturbance
- Task Force on Urban Psychology
- Task Force on Workplace Violence

## **Central Office**

While the APA's governance members establish the policies and priorities for the Association, the chief executive officer is responsible for implementing these policies and procedures and running the business aspects of the APA by managing and staffing the APA's Central Office. The APA's Central Office staff support and inform the work of all the boards and committees, run one of the largest

scientific publishing houses in the world, invest in stocks, manage real estate, and interact with private, state, and federal agencies and organizations. In addition to collecting roughly \$16.5 million in member dues and fees each year and \$41 million from the Communications Programs, the Central Office generates additional income of almost \$15 million to expand the activities and services of the APA. Actual dues represent only 16 percent of the revenues needed to run the APA.

To serve the particular interests of the APA's diverse membership and the needs of the discipline as a whole, APA's Central Office is overseen by an Executive Office and organized into several semi-independent directorates that include Practice, Science, Public Interest, Education, and Central Programs. The Central Programs directorate is comprised of offices whose work applies to all areas of the Association, and includes the American Psychological Association of Graduate Students, Research, Ethics, International Affairs, Convention and Meeting Services, Public Policy, and the APA's Library and Archives. Similarly, the APA also has directorates that aide in the business, governance, and public outreach aspects of the Association. These include: Publications, Member and Public Communications, Finance, and Internet/Management Information Systems.

SEE ALSO: ► Allport, Gordon W. ► Bandura, Albert ► James, William  
► Maslow, Abraham ► Rogers, Carl ► Seligman, Martin ► Watson, John B.

## **Americans with Disabilities Act of 1990**

Karrie A. Shogren

*University of Texas at Austin*

The Americans with Disabilities Act (ADA) is a federal law that prohibits discrimination on the basis of disability. It was signed into law on July 26, 1990 by President George H. W. Bush. In enacting the ADA, Congress stated that prejudice and discrimination have denied people with disabilities the opportunity to compete on an equal basis and achieve full participation, independent living, and economic self-sufficiency.

While other laws, such as the Civil Rights Act of 1964, provided protection against discrimination on the basis of race, sex, national origin, and religion, no *comprehensive* laws existed that provided protection against discrimination on the basis of disability. For example, Section 504 of the Rehabilitation Act of 1973 banned discrimination on the basis of disability, but it only extended its protections to programs that were receiving federal financial assistance, such as public schools and universities and other federal programs. There were no legal protections available to people with disabilities in the private sector or in state and local programs not receiving federal funding. Therefore, Congress stated that there was a critical need to provide enforceable standards to address the day-to-day discrimination experienced by people with disabilities in areas such as

employment, housing, public accommodations, education, transportation, communication, recreation, institutionalization, health services, voting, and access to public services. Congress also acknowledged that discrimination against people with disabilities can take many forms, such as outright intentional exclusion, the discriminatory effects of architectural, transportation, and communication barriers, overprotective rules and policies, failure to make modifications to existing facilities and practices, exclusionary qualification standards and criteria, segregation, and relegation to lesser services, programs, activities, benefits, jobs, or other opportunities.

The ADA defines a person with a disability as someone who: has a physical or mental impairment that substantially limits one or more major life activities (for example, mental retardation); has a record of such an impairment (for example, an individual with a history of drug or alcohol abuse); or is regarded as having such an impairment (for example, an individual with disfigurement from an injury or birth defect that because the nature of the impairment is perceived by others as having a disability). Major life activities include activities that an average person can perform with little or no difficulty such as caring for oneself, performing manual tasks, walking, learning, and working. When the ADA was passed in 1990, Congress estimated that 43 million Americans had one or more physical or mental disabilities. In defining individuals with disabilities not only as people who currently have a disability but also as people who have a history of a disability or who are regarded as having a disability, Congress extended the protections of the ADA to individuals who experience discrimination on the basis of past or perceived disability. Congress was acknowledging that stereotypic assumptions about disability can result in participation restrictions and limitations, unequal treatment, and political powerlessness for individuals with current, past, and perceived disabilities.

By acknowledging the impact of prejudice and discrimination on individuals with disabilities, the ADA directed increased attention to the interaction between limitations that result from a physical or mental impairment and the social context in which these limitations are expressed. This perspective, often called the *social* or *social-ecological model of disability*, has received significant attention since the advent of the disability rights movement in the 1970s. Modeled after the civil rights movements that preceded it, the disability rights movement brought increased attention to the influence of social, cultural, political, and environmental factors in defining and shaping the experiences of people with disabilities. For example, a person who uses a wheelchair may experience limitations in his or her ability to participate in society because public accommodations like grocery stores, restaurants, and hotels are not accessible. Such a person may not be able to shop at a grocery store if the aisles are not wide enough for a wheelchair to pass through or may not be able to stay at a hotel when traveling if an accessible bathroom is not available. Therefore, the goal of the ADA was to provide standards to eliminate such discriminatory practices.

The ADA provides specific standards for eliminating discrimination in four broad areas: private-sector employment; public services, including transportation services;

public accommodations, such as hotels, grocery stores, shopping malls, restaurants; and telecommunications.

## **Private-Sector Employment**

The ADA states an employer cannot discriminate against a qualified individual with a disability in the job application process, in the hiring, advancement, or discharge process, in employee compensation or job training, or in any other facet of employment. The term *qualified individual with a disability* means an individual with a disability who, with or without reasonable accommodations, can perform the essential functions of the job. The essential functions of the job are typically defined in the description of the position created by the employer when advertising and interviewing job applicants. During the interview process, employers can ask about an individual's ability to perform the essential functions of the job, but cannot inquire if the person has a disability or subject the person to tests that screen for disability, unless all applicants are subject to such screening.

Employers are required to make reasonable accommodations to the known physical or mental limitations of an otherwise qualified individual with a disability unless the employer can demonstrate that the accommodation would impose an undue hardship on the operation of the business. A reasonable accommodation is any modification or adjustment to a job or the work environment that enables an otherwise qualified person with a disability to perform essential job functions. Reasonable accommodations can include: making facilities accessible; job restructuring; part-time or modified work schedules; reassignment to a vacant position; acquisition or modification of equipment or devices; appropriate adjustment or modifications of examinations, training materials or policies; the provision of qualified readers or interpreters; and other similar accommodations. When considering whether an accommodation represents an undue hardship, the ADA suggests consideration of the nature and cost of the accommodation in relation to the size, resources, nature, and structure of the business. Since the passage of the ADA, research has suggested that reasonable accommodations tend to be of relatively low cost to the employer in the majority of cases. For example, the Job Accommodation Network, a service of the Office of Disability Employment Policy in the U.S. Department of Labor, has reported that 71% of accommodations cost \$500 or less, with 20% of these accommodations having no direct cost to the employer.

## **Public Services**

Under the ADA, public services include services, programs, and activities provided by state and local governments and their affiliates. The ADA states that state and local governments may not discriminate against a qualified individual with

a disability. The term qualified individual with a disability in this context means an individual with a disability who meets the essential eligibility requirements for services, programs, or activities provided by the state or local government. In addition, all government facilities, services, and communications must be made accessible to people with disabilities. Public services can include libraries, recreation facilities, health services, social services, and transportation services.

Standards for making public transportation services accessible to people with disabilities are specifically addressed in this section of the law. Separate rules were created for different types of transportation systems, with special rules for public bus and rail systems. Over time, all public transportation systems must be made accessible to individuals with disabilities.

## **Public Accommodations**

The ADA also bans discrimination in public accommodations. Specifically the law states that no individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation. Public accommodations are defined as privately-owned entities not operated by state and local governments and can include restaurants, hotels, grocery stores, doctors' offices, parks, and private schools. However, most private clubs and religious organizations are exempt. Thus, the ADA prohibits discrimination in all programs and services, even those privately owned and operated.

Discrimination, in this context, can include: eligibility criteria that screen out individuals with disabilities; failure to make reasonable modifications in policies, practices, or procedures to avoid discrimination; failure to provide auxiliary aids and services to ensure effective communication such as interpreters, materials in large-print, etc.; and failure to remove architectural barriers in existing facilities and transportation barriers in existing vehicles and rail passenger cars. However, in cases where a public accommodation can demonstrate that making such modifications would fundamentally alter the nature of the goods, services, facilities, privileges, advantages, or accommodation offered, or that such modification is not readily achievable, alternative methods to make such goods, services, facilities, privileges, advantages, or accommodations available may be established. Further, all newly constructed public accommodations must be made accessible to people with disabilities.

## **Telecommunications**

The ADA requires that all companies offering telephone services ensure functionally-equivalent services for individuals with disabilities, specifically those who are deaf or hard-of-hearing or who have speech impairments. For example, telephone relay

services must be available for individuals who use telecommunication devices for the deaf (TDD) or similar devices.

## Current and Future Issues

Since the ADA was signed into law in 1990, regulations have been written and court cases have been litigated to establish its boundaries. For example, several Supreme Court cases have established who is protected under the ADA. In *Bragdon v. Abbott* the Court ruled that individuals infected with HIV were protected by the ADA, but, in *Sutton v. United Air Lines, Inc.*, the Court ruled that individuals whose impairments were correctible or treatable, in this case individuals with nearsightedness that could be corrected by eyeglasses, were not eligible for the protections of the ADA. Other Supreme Court cases have established that states must provide services to individuals with mental retardation in the most integrated setting appropriate, and that states can be required under the ADA to make public buildings, such as courthouses, accessible to people with disabilities. However, the concern expressed by several members of the 101st Congress when the ADA was enacted that a “flood of lawsuits” would result has not materialized. Research has suggested that, particularly with regard to the employment provisions of the ADA, most claims are resolved out of court.

The passage of the ADA has led to significant progress in creating a more inclusive society for people with disabilities; however, as of 2006, many policy makers, researchers, and disability rights advocates agree that the ADA has not yet achieved its goal of eliminating discrimination against people with disabilities. The National Council on Disability (NCD), an independent federal agency charged with making recommendations to the President and Congress to enhance the quality of life for all Americans with disabilities and their families, wrote in their 2006 annual report titled, *National Disability Policy: A Progress Report*: “while . . . the country is moving forward, expanding opportunities and inclusion for Americans with disabilities, the rate of progress is slow. Federal policy still contains inconsistent messages and unrealistic requirements for people with disabilities” (p. 1). The NCD identified several areas that must be addressed in order to increase the effectiveness of the ADA in reaching its goals of equality of opportunity, full participation, independent living, and economic self-sufficiency, including: increasing public understanding and awareness of the ADA, increasing coordination across federal agencies in the interpretation and application of the provisions of the ADA, evaluating current ADA enforcement strategies, including the role and efficiency of technical assistance and mediation, and directing further attention to current and emerging issues affecting the disability community including genetic discrimination, voting rights, the rights of institutionalized persons, and the availability of affordable housing.

SEE ALSO: ► Positive law and policy ► Rehabilitation psychology



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## Amusement

Michelle N. Shiota  
Arizona State University

*Amusement* is the positive emotion experienced during play – either physical, rough-and-tumble play, or mental play in the form of games, puzzles, and humor. Although researchers typically emphasize one or other of these elicitors in their work, a growing body of evidence suggests common features in the emotional aspects of physical and mental play. One central characteristic of all play is cognitive flexibility – redefining a situation from an alternate perspective. In physical play, this might involve role-taking or inferring another person’s perspective in a game. In mental play, this might involve generating alternate possible courses of action, or “getting” the change of perspective suggested by the punch line of a joke. For this reason, amusement in either context may facilitate creativity, effective problem solving, and skill development.

Evidence from primates, infants, and adult humans suggests that physical play and humor share a behavioral signal. In primates, a facial expression including crinkled eye corners, upturned lip corners, and a dropped jaw or wide mouth indicates willingness to play. Since primate play typically involves mock aggression, the “drop-jaw” component of this expression may indicate that no real harm is intended. Developmental researchers working with infants and toddlers have also identified a “duplay” smile, which includes a similar jaw drop exposing the upper and lower teeth, during rough-and-tumble play and humor about taboo topics (e.g., nudity) or another’s clumsiness. The duplay smile is observed more often in toddler play with fathers than with mothers, probably due to fathers’ greater emphasis on rough-and-tumble play. The duplay, drop-jaw smile also corresponds to the facial expression of amusement identified in adult humans.

In recent decades, theory and empirical research on amusement have addressed three major issues. One of these is establishing the links between physical play and humor, on one hand, and creative cognition on the other. There is some evidence that physical, rough-and-tumble play is associated with mental flexibility in other domains. In elementary school boys, frequency of rough-and-tumble play activity predicts the variety of solutions they generate to hypothetical social problems. The flexibility of boys’ rough-and-tumble play (as measured by number of different types of play behaviors during an observation) also predicts the number of prosocial problem-solving strategies they are able to generate in

response to hypothetical scenarios. Theories of humor and neuroscience findings both suggest that humor perception also involves mental flexibility. In defining humor, theorists often emphasize the “cognitive shift” needed to understand the punch line of a joke, or the perception of “incongruous, contradicting, or opposing elements” that make sense when seen from another perspective. Given that creativity is defined as a combination of novelty/unexpectedness and utility/appropriateness, these theories suggest that amusement and creativity should be closely linked, although the exact nature of this link is still uncertain. Some studies have found that experimentally elicited amusement (after watching funny film clips) leads to enhanced performance on tests of creativity, although it is still unclear whether these effects are due to amusement in particular or positive affect in general.

Another strong line of research has examined individual differences in sense of humor, considering predictors and correlates of this personality trait. Several well-recognized measures of humor appreciation are available, including Martin and Puhlik-Doris’s Humor Styles Questionnaire and Ruch’s 3WD Humor Test. Finally, researchers are increasingly interested in the use of laughter to invite and communicate social support, noting that people often laugh in stressful or intimidating situations, and are more likely to laugh when companions are present than when alone.

A new focus of research addresses the central nervous system architecture of humor. Although only a few studies currently offer evidence on this subject, their findings are consistent with the cognitive theories of humor discussed above. Neurological patients with damage to areas of the prefrontal cortex believed to mediate integration across multiple pieces of information (Brodmann areas 10 and 11) show deficits in successful joke completion, and activation in this area distinguishes between the reading of funny and unfunny jokes by healthy subjects. One study found that reading verbal jokes led to greater activation than nonjokes in the posterior temporal gyrus (Brodmann areas 21 and 37), an area believed to mediate the processing of alternative interpretations of words and assessing the overall coherence of language. However, research with animal models suggests that cortical regions such as these are not necessary for play behavior in other animals, so they may not mediate the experience of amusement *per se*.

A number of other studies also provide data on the outcomes of experimentally elicited humor, including autonomic nervous system aspects of the humor response and a range of cognitive implications. However, most of these were designed as tests of the effects of “positive affect,” incidentally using funny video clips as the experimental stimulus. As a result, it is unclear from this research whether the observed effects are due to amusement *per se* or to positive affect more generally. Researchers are now beginning to look more explicitly at the cognitive, physiological, and behavioral effects of specific positive emotions, including amusement.

SEE ALSO: ► Creativity ► Humor ► Play ► Positive emotions

## Anticipatory Enthusiasm

Michelle N. Shiota

Arizona State University

*Anticipatory enthusiasm* is the positive emotion experienced while one anticipates acquiring and/or consuming some kind of reward. Panksepp (1998, p. 147), described the environmental stimuli that elicit this emotion as “unconditional, distal, incentive cues of reward,” meaning that the environment presents a cue of a definite reward to come in the near future, provided that the organism expends some energy to pursue it. Evidence of this emotion, and the neurological pathway underlying its experience, has been demonstrated across a wide range of mammals from rodents to humans. In laboratory mammals the reward is usually food, although in some species mates and offspring may also serve as rewards in this sense. In humans, stimuli eliciting anticipatory enthusiasm vary widely, including desired food (e.g., chocolate), money, other material rewards, and the promise of reunion with sexual/romantic partners or offspring.

Because psychologists and neurologists have long been interested in the neurological underpinnings of motivation, and because appetitive behavior is easily elicited and observed in laboratory mammals, the neural substrates of anticipatory enthusiasm are fairly well understood. Researchers have consistently identified a neurological pathway, labeled variously as the *behavioral activation system*, the *behavioral facilitation system*, and the *seeking system*, that includes the lateral hypothalamic nucleus accumbens (NAcc) shell and ventral tegmental area (VTA), and in some cases areas of the frontal cortex, that produce appetitive behavior in laboratory mammals when stimulated electrically. This appetitive behavior varies somewhat depending on environmental cues, but may include feeding, drinking, gnawing on things, cage exploration (presumably searching for food if none is present), and sex. Research with both rodent and human subjects suggests that the activity in this pathway is particularly sensitive to the magnitude of possible upcoming rewards, evaluated relative to recently received rewards. Human functional magnetic resonance imaging (fMRI) studies also suggest that NAcc firing only reflects the magnitude of a potential reward, without being influenced by the probability of the reward or a cost-benefit ratio.

Neural transmission in this pathway relies primarily on dopamine, and a substantial body of research on humans as well as laboratory mammals supports a critical role of dopamine in anticipatory enthusiasm and appetitive behavior. Dopamine agonists (drugs that activate dopamine pathways, either by mimicking dopamine, by encouraging its release into the synapse, or by blocking its reuptake into the presynaptic neuron) typically produce reward-seeking behavior, and dopamine antagonists (drugs that reduce or block dopamine transmission) tend to reduce reward-seeking behavior. In humans, many drugs of addiction act as dopamine agonists, including alcohol, cocaine, and the amphetamines (although marijuana, MDMA, and opiates such as heroin act primarily on other

neurotransmitter systems). Also, behaviors to which people may potentially become “addicted,” such as gambling, shopping, and sex, typically involve reward seeking and activation of dopaminergic reward pathways.

Anticipatory enthusiasm is typically experienced as pleasurable, and it is not unusual for people to enjoy looking forward to some pleasurable event as much as or more than the event itself. However, anticipatory enthusiasm may also be experienced as unpleasant craving, and even when a reward is anticipated, one may not necessarily experience sensory pleasure upon consumption. Berridge and Robinson differentiate *liking* from *wanting* in the context of addiction, noting that once addicted one can crave some substance of abuse without actually receiving much pleasure from consuming it. However, once one is satiated with a reward (e.g., chocolate), dopamine activation in reward pathways tends to decrease, even when the reward is presented again. Thus, the reward value of stimuli is not constant, but can change depending on one’s level of need versus satiation. Also, once dopaminergic reward systems are activated, studies with lab rodents suggest that reward-seeking behavior can switch easily from one target (e.g., food) to another (e.g., water).

In humans, anticipatory enthusiasm can be elicited in the laboratory through various types of gambling tasks, or by showing the subject photographs of desired objects such as food, money, or material goods. Dispositional anticipatory enthusiasm is strongly correlated with the Big Five personality factor Extraversion, and several theorists have proposed that these are both rooted in individual differences in reactivity of the neurological reward systems discussed above. Current research addresses the autonomic nervous system aspects of anticipatory enthusiasm, the implications of anticipatory enthusiasm for social cognition, and the role of anticipatory enthusiasm in behavioral responses to social power.

SEE ALSO: ► Appetitive motivational systems ► Dopamine  
► Functional MRI ► Positive emotions

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## Appetitive Motivational Systems

Nancy A. Fry  
*University of Kansas*

Appetitive motivational systems promote approach behaviors that seek a reward or positive outcome, whereas aversive motivational systems promote avoidant

behaviors that seek to avoid punishment or a negative outcome. Supported by neurophysiological evidence demonstrating activity in different parts of the brain and nervous system in response to reward-based stimuli versus punishment-based stimuli, the appetitive and aversive systems are thought to be distinct and relatively independent. This suggests that the two systems can be active at the same time and interact with each other. Every individual is believed to have a particular level of sensitivity for rewards-based stimuli and another level of sensitivity for punishment-based stimuli. Sensitivity for one system is not thought to be directly related to or predictive of an individual's sensitivity for the other system. This can result in a multitude of diverse appetitive/aversive combinations among people and suggests an intriguing and important individual difference.

Within the domain of motivation, there are various terminologies for the appetitive/aversive distinction including *approach/avoidance*, *positive/negative*, *promotion/prevention*, and *discrepancy-reducing/discrepancy-enlarging*. Some motivational theories are explicit in recognizing this reward-seeking versus punishment-avoidant dimension, whereas others are more implicit. Brief descriptions of several motivational systems are presented with the focus on the appetitive system.

Gray's theory of motivation posits an appetitive behavioral activation system (BAS) in response to reward or nonpunishment environmental cues and an aversive behavioral inhibition system (BIS) in response to punishment, nonreward or novelty cues. BAS activity is thought to result in the movement toward goals and to be associated with positive emotions such as happiness, hope, and elation. In 1994, Carver and White developed a BIS/BAS scale to measure an individual's sensitivity level to each system. Research consistently has shown higher BAS sensitivity to be associated with higher positive affect and higher BIS sensitivity to be associated with higher negative affect. Providing neurophysiological evidence for independent appetitive and aversive systems, studies utilizing electroencephalographic (EEG) and neuroimaging technologies show greater activity in the regions in the left prefrontal cerebral cortex in response to BAS stimuli or in an individual with a higher BAS score, whereas there is greater activation in regions in the right prefrontal cerebral cortex in response to BIS stimuli or in an individual with a higher BIS score.

These two systems are thought to be managed by separate regulatory systems. Two self-regulation behavioral theories, Higgins' regulatory focus theory and Carver and Scheier's discrepancy-reducing/discrepancy-enlarging feedback process model are based upon the appetitive/aversive distinction. Both theories posit self-regulation approach processes that seek to reduce discrepancies between current states and desired end-states or goals. Affect is also integral to both theories.

Higgins' regulatory focus theory posits that one's behavioral self-regulation adopts either a promotion (appetitive) or prevention (aversive) focus depending upon the basic survival need it is addressing. A promotion focus is in response to one's nurturance or nourishment needs, whereas a prevention focus is prompted

by security-related or protection needs. Higgins also suggests that one's desired end-states may reflect either *ideal* goals (e.g., hopes and aspirations) or *ought* goals (e.g., duties and responsibilities) which involve a promotion or prevention focus respectively. Promotion focus is then a regulatory state that is concerned with the presence or absence of positive outcomes (aspirations, advancement, and accomplishment) and attempts to move the individual toward the goals of their *ideal self*.

Emotions are an important part of this self-regulation process. Successful goal attainment can result in cheerfulness-related emotions such as being happy or satisfied. Nonattainment of ideal goals results in not only the absence of the positive outcome but is also associated with the absence of positive emotions (i.e., dejection-related feelings) such as disappointment or discouragement.

Building on his regulatory focus theory, Higgins' posits the regulatory fit effect which suggests that matching one's regulatory state (either promotion- or prevention-focus) with the manner in which one pursues a goal will enhance motivational strength during the process and result in improved goal performance. One manner of goal pursuit is through the use of strategic means. For promotion-focused ideal goals, an eagerness-related approach strategy is thought to best sustain motivational intensity. For example, undergraduate study participants were asked to write a report about how they would spend an upcoming Saturday and to imagine certain steps to accomplish that goal. Instructions for these steps were either framed as eagerness strategies or as vigilance (prevention) strategies. Eagerness-related instructions included asking participants to a) imagine a convenient time to write the report, b) imagine a comfortable place to write, and c) imagine making their reports very interesting. Participants were also measured for their tendency to adopt either a promotion or a prevention focus. Promotion-focused individuals who were given the eagerness-related instructions (the prevention-focused individuals were given vigilance strategies) were 50% more likely to turn in their reports than those individuals whose regulatory state did not correspond with the strategic means. One's regulatory state can also be manipulated by situational factors such as instructions or feedback to induce a promotion or prevention focus. For example, framing goals in terms of gains or nongains will induce a promotion focus.

A second theory of behavioral self-regulation is Carver and Scheier's model of discrepancy-reducing (approach) and discrepancy-enlarging (avoidant) feedback loop systems. Discrepancy-reducing feedback processes attempt to move the individual closer to goal acquisition by assessing one's position relative to the goal and developing the steps to reduce the perceived distance. This is essentially an approach process toward positive goals.

Affect plays an integral role in the feedback process and is suggested to be reflective of the individual's perception of the rate of progress toward the desired goal as compared to a criterion. This comparison results in an error signal in the feedback loop and induces positive or negative affect depending upon whether the rate of progress is above (doing well) or below (not doing well) the criterion respectively. Carver and Scheier suggest that although it involves positive affect

in either case, doing well moving toward a goal (discrepancy-reducing) is not the same as doing well moving away from an anti-goal (discrepancy-enlarging). Therefore, they posit that affect is comprised of two bipolar dimensions, one associated with discrepancy-reducing behaviors and the other with discrepancy-enlarging behaviors. Emotions for discrepancy-reducing approach behaviors range from elation (doing well; positive affect) to depression (not doing well; negative affect). Outcomes of discrepancy-reducing systems appear to be to be associated with conformity whether that is to group norms, personal attitudes, *ideal selves*, or *ought selves* and, generally, to promote goal pursuit.

Another appetitive motivational system that promotes goal pursuit is that of learning orientation. Learning orientation is the appetitive form of achievement motivation or goal orientation (i.e., how one approaches a task or goal in an achievement setting). Individuals with a learning orientation seek to improve their competence by developing new skills and mastering new situations. They hold an incremental view of ability which posits that competencies grow and develop through effort, experience, and practice. As a result, those with a higher learning orientation tend to set challenging goals, seek new experiences, practice and evaluate their skills, and persevere in the face of obstacles. Errors and failures are considered a source of learning and feedback is actively sought in order to enhance performance. In learning and acquiring knowledge, a learning orientation promotes the utilization of a deep-processing method involving critical thinking and the ability to generalize concepts to new situations.

Whereas most bivariate systems posit one appetitive and one aversive subtype, goal orientation research provides evidence of a third subtype: that of an appetitive/aversive hybrid called *performance-approach orientation*. Individuals with a performance-approach orientation are concerned about comparisons with others and seek to obtain favorable judgments of competence. Whether an appetitive or aversive approach to a particular task or situation is taken depends on the individual's perception of his or her likelihood of success. In those areas where success and therefore favorable judgments are probable, an appetitive approach will be adopted. If the likelihood of failure is perceived to be greater, an aversive approach is taken so as to avoid a potential unfavorable judgment.

Recently, Gable offered a hierarchical model of approach and avoidance social motivation. Social motivation is the process of establishing and maintaining social bonds. The model posits that distal appetitive/aversive social motives prompt more proximal approach/avoidant social goals to produce positive or negative social outcomes which ultimately influence well-being and health. Approach social motives are based on the need for affiliation with others whereas avoidant social motives are predicated on a fear of rejection from others. The approach system seeks rewarding, positive outcomes (affiliation and intimacy) with pleasing relationships and social interactions characterized by such rewards as companionship, fun, and understanding. Not attaining these positive outcomes result in painful relationships and interactions.

Research findings supported the assumption that individuals with approach social motives are more likely to adopt approach goals and similarly, avoidant motives

were associated with avoidant goals. In addition, employing approach social goals predicted less loneliness, greater satisfaction with social relationships and more frequent positive social events compared with those who used avoidant social goals. Gable's model was supported in a related study of friendship goals. Friendship-approach goals also predicted less loneliness, greater relationship satisfaction, and more frequent positive relationship events. In addition, a positive longitudinal change in subjective well-being was found. Other social motivation research has shown that individuals higher in affiliation behaviors are less anxious, more self-confident, view themselves as similar to others and were judged positively by others.

SEE ALSO: ► Aversive motivational systems ► Positive affectivity  
► Proactive coping ► Promotion focus

## Applied Positive Psychology

Acacia C. Parks-Sheiner  
*University of Pennsylvania*

In the introductory remarks of *Positive Psychology in Practice*, editors P. Alex Linley and Stephen Joseph argued that the goal of applied positive psychology is to facilitate *optimal functioning* using positive psychology research as a foundation. This definition is broad, and appropriately so, for positive psychology can be applied at many different levels of analysis (individuals, groups, institutions, and societies); in many different settings (work, school, and home); via many different modes of administration (consultants, coaches, teachers, therapists, employers, and even online); for use in many different populations (non-distressed individuals, people coping with disabilities or physical illness, people at risk of developing or currently suffering from mental disorders); and with an interest in many different desired outcomes (subjective well-being, social cohesion, productivity, physical health, etc.).

Positive psychology covers a wide breadth of topics, and the number of potential avenues for application is massive. Furthermore, positive psychology is an interdisciplinary field; the arenas in which these applications might take place extend into the worlds of business, coaching, medicine, clinical practice, and so on. The literature is rife with proposed applications in all of these areas, but is for the most part lacking in actual implementation and empirical study of such applications. Four particularly prominent areas of applied positive psychology are highlighted below.

### Increasing Happiness

One straightforward application of positive psychology, perhaps one of the most well researched thus far, is the development of methods for increasing happiness. Although there is evidence that each individual has a happiness set point – a



baseline level of happiness to which they are likely to return as they adapt to changes in their life – there is also evidence that individuals can achieve sustained increases in happiness by modifying their volitional behavior.

The majority of happiness-increasing interventions that have been empirically tested are single modifications to volitional behavior, often referred to as *exercises*. To date, several individual exercises have proven effective in randomized, controlled studies. Studies on individual exercises have several advantages over studies of more complex interventions. They allow researchers to disentangle which exercises do and do not work, and to determine the best way to administer a given exercise to optimize its effects. The use of individual exercises can also be more theoretically informative; if an individual is interested specifically in the role of gratitude in promoting happiness, using a gratitude intervention alone would be more informative than using a set of exercises containing a gratitude intervention.

This is not to say that there is no place in the science of applied positive psychology for more complex interventions. Indeed, in the world outside of research, it is far more likely that exercises will not be used in isolation, and may even be used in conjunction with other existing interventions. Research is certainly needed to evaluate the effects of positive exercises in real-world settings, as they may differ substantially from those observed when the exercises are administered alone. One potential avenue for research in this domain is through *life coaches* – some of whom apply these exercises in the context of their standard practice – although there is little research in this area to date.

## Enhancing Clinical Practice

A related line of inquiry involves applications of positive psychology to clinical psychology, both as a way of modifying existing clinical practice, and as the basis for developing new treatments.

### Positive Interventions as Adjuncts

At least two positive therapeutic interventions have been designed and implemented as adjuncts to existing therapy modalities.

Michael Frisch's quality of life therapy (QOLT) is designed primarily as a supplement to cognitive therapy; it offers the goal of increasing life satisfaction and, keeping this goal in the forefront throughout treatment, provides relevant cognitive and behavioral techniques for doing so. QOLT is fully manualized, but very little research has evaluated its efficacy for treating clinical populations.

Giovanni Fava and Chiara Ruini's well-being therapy (WBT) targets maladaptive thought patterns that prevent clients from achieving psychological well-being. It operates under the assumption that the amelioration of symptoms alone does not increase well-being, and that absence of well-being leaves remitted clients vulnerable to relapse. As such, WBT is primarily intended for individuals who

have undergone and responded to treatment for mood or anxiety disorders, but who remain at risk for relapse.

### Standalone Positive Interventions

There are also positive psychology interventions intended as standalone treatments.

Throughout the positive psychology literature, mindfulness has been well-established as a source of well-being. Acceptance and commitment therapy (ACT), first proposed by Steven Hayes, is a standalone therapy that emphasizes the cultivation of mindfulness, taking stock of one's larger goals in life, and making a commitment to pursue those goals. Although the general focus of ACT remains on the negative aspects of the client's behaviors and circumstances, its integration of mindfulness and ultimate concern with well-being as an outcome makes it distinct from standard cognitive and behavioral approaches.

Lastly, positive psychotherapy (PPT) – originating from work by Martin Seligman, Tayyab Rashid, and Acacia Parks-Sheiner at the University of Pennsylvania – is a standalone intervention for mood disorders, the goal of which is to identify and foster the positive aspects of clients' lives. PPT seeks to help clients identify and use their strengths in order to create pleasure, engagement, and meaning in their lives, and to use these resources as a buffer against negative events.

## Promoting Work Productivity and Satisfaction

Principles of positive psychology have been applied in the business world for decades through vehicles such as executive coaching and consulting towards the goal of increasing work productivity and satisfaction. Although the effectiveness of such tools is supported in many cases by anecdotal evidence, controlled research is, in many cases, sparse. One notable exception is the use of *strengths-based practice* by Gallup, pioneered by Donald Clifton. In a variety of settings over the past 30 years, Clifton and colleagues have examined the effects of structuring the work environment around employees' strengths. In addition to many qualitative findings suggesting the effectiveness of a strengths-based approach, they report quantifiable increases in productivity, engagement, and life satisfaction among employees.

Although there is a plethora of research on the many correlates of high work productivity and satisfaction, only a few studies assess whether these factors play a causal role via intervention. One such study, conducted by Adam Grant at the University of Michigan, found that employees are more motivated when the positive impact their work has on other peoples' lives is made more salient. There are several other research findings that could easily lend themselves to this sort of intervention. One notable example is Barbara Fredrickson's research on the relationship between positive emotion, creativity, and effective communication. Interventions designed to promote transformational leadership, a leadership style predictive of many positive work outcomes, would be another promising future direction.

## Education

One arena in which applied positive psychology has thrived for many years is higher education. Undergraduate and graduate-level courses in positive psychology are offered at many academic institutions across the US, and many of these courses share the common goal of applying the principles of positive psychology as part of the learning process. The practice of positive interventions has been an integral aspect of many positive psychology syllabi beginning with Seligman's early courses on the topic. It was recently solidified as a standard method of the field in Chris Peterson's seminal introductory positive psychology textbook, *A Primer in Positive Psychology*, which provides positive exercises appropriate to the concepts in each chapter. A growing number of PhD programs allow a formal or informal specialization in positive psychology and, as of 2003, the University of Pennsylvania offers a formal Masters of Applied Positive Psychology (MAPP).

There are also some promising directions for the application of positive psychology in secondary schools. Researchers from Swarthmore College (Jane Gillham), the University of Pennsylvania (Martin Seligman, Karen Reivich), and the University of Michigan (Chris Peterson) are evaluating a positive psychology curriculum at Strath Haven High School in Wallingford, PA. The program, which focuses on character development and fostering positive emotion, is integrated with the ninth-grade language arts curriculum; it is currently undergoing rigorous empirical evaluation over a four-year period. The same research group is working with the Geelong Grammar School in Melbourne, Australia, to create a school-wide positive psychology curriculum and to help teachers and administrators use positive psychology principles in their day-to-day interactions with students. Although the results of these applications have not yet been evaluated, they represent two examples of positive psychology's potential for large-scale implementation at the institutional level.

## Promising Directions

As mentioned previously, there are many potential applications of positive psychology that have been discussed in the literature, but have not yet been implemented. Such cases are far too plentiful to recount here; however, a few areas that are especially ripe for application are highlighted below.

First, Shelly Gable and colleagues have found that people who help their loved ones savor life's victories, and whose loved ones respond in kind, are more satisfied in their relationships. An important next step would be to determine whether it is possible to train individuals to respond more effectively to good news, and to assess whether doing so leads to greater relationship satisfaction.

Second, Angela Duckworth's work on non-IQ predictors of success suggests that positive individual characteristics – specifically, self-discipline and grit – are

more predictive of success in academic settings than are measures of intelligence for both children and adults. This begs the question of whether it is possible to teach grit and self-discipline, and whether doing so would lead to greater academic success.

Lastly, a recent meta-analysis by Sonja Lyubomirsky, Laura King, and Ed Diener suggests that happy people are healthier, live longer, have better social networks, and are more successful in their careers. In addition to being desirable characteristics for individuals, these sorts of variables are of interest to educators, employers, and policy makers. If it is, indeed, possible to affect outcomes of this magnitude by increasing happiness, the development of cost-effective happiness-increasing interventions – coupled with accurate methods of assessing happiness at the national level (per Ed Diener and colleagues' work on developing national indicators of well-being) – could change the face of public policy.

## The Future of Applied Positive Psychology

Positive psychology has resulted in the creation of a variety of tools and interventions for facilitating optimal functioning in both individuals and institutions. Many happiness interventions are nonspecific to the contexts in which they are applied, making it easy to adapt interventions from one domain for use in other domains. The broad applicability of positive interventions to so many settings and populations is one of applied positive psychology's greatest strengths.

The field of applied positive psychology faces two major challenges. The first is the need for implementation; the number of proposed applications of positive psychology research is high, but the number of efforts to implement and test such applications is disproportionately low. Second, like many applied fields, applied positive psychology suffers from a lack of communication within and between relevant fields. There are a preponderance of disconnected theories and models with few efforts to synthesize them. Although texts like *Positive Psychology in Practice* (which assemble chapters by various individuals whose work is relevant to a general topic) are a good start, efforts must also be made to achieve an active integration of overlapping models and approaches.

Positive psychology is rapidly garnering interest from individuals, businesses, educators, and even policy-makers who want to know how best to enable people to reach their full potential. The future of applied positive psychology lies in conducting the research that will answer this question, and facilitating widespread implementation of interventions to enhance optimal functioning across all areas of life.

SEE ALSO: ► Character strengths (VIA) ► Happiness  
 ► Positive psychotherapy ► Strengths perspective (positive psychology)  
 ► Teaching positive psychology

## Aristotle

Michelle Mason and Valerie Tiberius

*University of Minnesota*

The ancient Greek philosopher and scientist Aristotle (384–322 BCE) lectured and wrote on a wide range of topics, including logic, metaphysics, physics, mathematics, biology, psychology, rhetoric, aesthetics, and ethics. One contemporary area in which Aristotle's influence remains prominent is that of moral psychology. There, his investigations covered everything from the nature of intentional action, to an account of the virtues of character and their place in a good life, to nuanced examinations of the gamut of emotions.

In the *Nicomachean Ethics*, Aristotle set out to examine a question we would regard as ethical but which he treated as a concern of politics (because it is the business of the politician to ensure a polis of thriving citizens): the question of what kind of life is a worthwhile one for us as rational creatures. Aristotle treated this as the question of what is the “highest” good for a person and he answered it by equating the highest good with *eudaimonia* (translated, alternatively, “happiness” or “flourishing”).

Proceeding, as was his method, from the common beliefs (*endoxa*) concerning which lives are worth living, Aristotle argued that *eudaimonia* requires that we realize human excellences of character (*ethos*) and of intellect (wisdom, or *phronesis*).

Although the ethical virtues are required if a person is to flourish or be happy in Aristotle's view, he departed from the ancient Stoics in insisting that they are not sufficient. For one, some of Aristotle's virtues have the feature that a person cannot exercise the virtue without having access to certain resources. For example, a person simply cannot count as munificent without having great wealth to expend. Aristotle was also concerned to offer an account of voluntary action and responsibility that supports the view that we can be appropriately praised or blamed both for our characters and the actions that result from them.

In conjunction with other works, such as his *Rhetoric*, Aristotle offers the contemporary psychologist a rich conceptual sketch of attitudes, emotions, and feelings such as shame, pride, and anger. Aristotle's account of pleasure, in particular, offers a compelling alternative to some contemporary views. For Aristotle, though virtue is typically pleasant, pleasure is not the aim of virtue. Pleasure is the “bloom on the rose” of virtuous activity; it should not be taken to be our reason for cultivating the virtues and it would not be valuable were it not for the value of the activity.

While Aristotle considered himself a scientist, his moral psychology is more conceptual and normative than empirical. Certainly, his method of proceeding from the common beliefs served to anchor his investigations to the empirical phenomena in question, but ultimately his moral psychology was prescriptive. He urged his students to order their lives rationally so that all that fell within their domains of choice (including actions and affects) would be directed to their

proper objects at the proper time and in the proper proportion, as his “doctrine of the mean” prescribed.

SEE ALSO: ► Eudaimonia ► Flourishing ► Good life  
► Moral development ► Virtues

## Attachment Theory

Hal S. Shorey

*Massachusetts General Hospital/Harvard Medical School*

As a lifespan theory of personality development, attachment theory provides a framework for understanding how adaptive traits are formed in childhood interpersonal contexts. Of these traits, attachment security has been championed as a common process underlying many other positive attributes. In addition to studying childhood developmental processes contemporary attachment researchers now have extended the theory to adult personality, interpersonal functioning, and mental health. Primary strengths of the theory are that it: 1) can be applied equally well to childhood and adult functioning; and 2) juxtaposes positive and negative developmental trajectories. This juxtaposition enables researchers and clinicians to identify maladaptive patterns quickly and choose the best interventions or programs to more closely approximate positive development and maximize adaptive functioning.

Attachment theory has its roots in the seminal writings of John Bowlby. In the years following World War II, Bowlby became disillusioned with psychodynamic “object relations” theories, which asserted that the genesis of pathological development lay within children. He countered that factors present in the real external environment (i.e., parenting vs. childhood fantasy) were primarily implicated in personality development.

Drawing on the work of those in the natural sciences, Bowlby proposed that young humans are biologically predisposed to maintain attachments to groups and more powerful others because maintaining such attachments has basic survival value. If the child strays too far from the caregiver, the attachment system creates intolerably high anxiety levels that motivate the child to reestablish proximity. Because security comes from caregivers, however, children must adapt their proximity-seeking strategies to match the caregivers’ parenting styles. For example, if parents are intolerant of emotional displays, children must avoid expressing strong emotions and find other ways to attain comfort while avoiding painful rejections. This example highlights that in order to adapt their proximity-seeking behaviors, children also must adapt their cognitive and emotional systems. It follows that across innumerable child/caregiver interactions the attachment system imbues individuals with characteristic ways of thinking, feeling, and behaving that remain relatively stable across the lifespan.

The means of assessing these cognitive-affective-behavioral patterns was developed by Mary Ainsworth and her colleagues and came to be known as the “Strange Situation” paradigm. In this procedure, young children are observed across a brief separation and reunion with their caregivers. Through their research Ainsworth and colleagues identified three prototypic patterns, or *attachment styles*, which they labeled *secure*, *anxious/ambivalent*, and *avoidant*. Main and Solomon later identified a fourth *disorganized* style.

The latter three attachment styles (anxious/ambivalent, avoidant, disorganized) were termed *insecure styles* to denote that security was not inherent in the parent–child relationship. Although the insecure styles relate to maladjustment, with the disorganized group having the worst outcomes followed by the anxious/ambivalent and finally the avoidant groups, these styles are positive adaptations in that they enable children to maximize feelings of security in the parent–child relationship. The price exacted for this initially positive adaptation is high, however, as insecure styles precipitate later deficits in affect regulation and interpersonal functioning.

In contrast to those who develop insecure styles, securely attached children are masters at regulating their emotions and thrive in interpersonal contexts. This is because, when parents consistently are available, warm, and responsive, while also maintaining high standards for their children’s behaviors, the children do not have to worry about their security needs. Rather, they are free to explore their environments and interpersonal surroundings without excesses of fear or anxiety. These children learn through experience that when they encounter challenges or threats, they can retreat to the safety of the parental *secure base*. In their secure base function, parents provide support, comfort, and reassurances to the unsettled children. Secure children thus learn that negative emotions can be tolerated and managed effectively.

When their emotions are calmed in such parental “holding environments” children can be provided with new strategies to use in attempts to overcome previously encountered impediments. Thus, in their “coach” roles parents foster goal development, provide positive emotions and motivation, and teach effective problem-solving skills. As this cycle is repeated throughout childhood in what Bowlby termed the *goal corrected partnership* children come to view themselves as efficacious and worthy of support, others as available and responsive, and the world as a safe and predictable place.

Having had their early emotional experiences validated (i.e., perceptions are accurate and emotional reactions appropriate), and having experimented with various problem-focused coping strategies, children develop the causal linkages that enable them to gauge accurately the effectiveness of their behaviors and other people’s reactions. Because of these good reality-testing skills, emotional balance, and positive expectations for interpersonal relationships, secure children are effective communicators and derive positive social-support perceptions. Aside from ameliorating loneliness, such positive social support perceptions are protective factors against the onset of depression and other negative mental-health outcomes.

These and other benefits of secure attachments are carried forward into adulthood because, once internalized, attachment styles take on lives of their own and become relatively fixed sets of beliefs and expectations about the world, the self, and others. Acting as self-fulfilling prophecies, the styles, which reflect underlying cognitive *schemas* or *working models*, lead the developing child to behave in ways that are consistent with how he or she expects to be treated by others. Such child behaviors, in turn, elicit reactions from others that are consistent with those expectations. In this way, attachment styles are reinforced throughout the developmental years and become road maps for perceiving, interpreting, and responding to environments into adulthood.

Mikulincer and his colleagues have applied cognitive research techniques in demonstrating how adults' internalized attachment working models can be activated by situational cues and influence adult emotions and behaviors. In this respect, adult attachment processes are similar to those observed in childhood, but adults rely more on symbolic cognitive representations (i.e., memories) of attachment figures as opposed to children's relying on real physical proximity to ameliorate distress under situations of mild to moderate distress.

Partially because of their abilities to regulate affect and sustain positive emotions, securely attached individuals consistently have better outcomes across a broad range of mental-health indicators relative to those with insecure styles. Moreover, secure individuals have internalized the aforementioned cause-and-effect linkages that enable them to anticipate outcomes accurately and develop alternate goal-pursuit strategies to use when encountering obstacles. These strengths and related positive outcome expectancies underlie many positive psychology constructs and associated outcomes. By extension, the published literature is rife with supporting citations.

The wealth of adult attachment research findings published over the past two decades largely was facilitated by the development of valid adult assessment procedures, including the Adult Attachment Interview (AAI) and numerous self-report measures. Whereas self-report measures are strong at assessing consciously held attachment-related attitudes and behaviors, the AAI may tap more subconscious attachment working models. It assesses attachment patterns not so much through scoring what people say, but, rather, how they say it. A secondary strength of the AAI is that it mirrors closely Ainsworth et al.'s initial attachment classification system, thereby facilitating investigations of the correspondence between infant and adult attachment styles (65% to 70% concordance rates). Learning to administer and score the AAI, however, can be an expensive and time-consuming process.

Self-report measures are less expensive and easier to administer. Since Hazan and Shaver published the first self-report attachment measure in the early 1980s, numerous self-report instruments, many with different classification systems, have appeared in the scholarly literature. Bartholomew and Horowitz developed a widely accepted measure and classification based on positive vs. negative *models of self* and *models of others*. More recently, Brennan, Clark, and Shaver took the best



items from all known self-report attachment scales and combined them in a new measure, the Experience in Close Relationships Scale (ECRS). The ECRS built on Bartholomew and Horowitz's classification system, but assigned styles not based on models of self and others, but, rather, on levels of attachment avoidance and attachment anxiety – the same two attachment dimensions that Ainsworth and colleagues found underlay the infant attachment styles.

In combining items from other self-report measures into a widely accepted classification, the ECRS has curtailed a major weakness in attachment research – namely too many measurement and classification systems. Nevertheless, assimilating information from across studies that have relied on different measures remains a daunting task to those who are new to the field. Moreover, responding to most self-report measure items necessitates experience in romantic relationships. Thus, some variance due to characteristics of romantic partners may be present in the measures. This additional source of measurement variance could partially explain the often weak correspondences between self-report measures and the AAI.

One way to address this latter dilemma is to heed Mikulincer and Shaver's call to move away from reporting results in term of styles and move toward assessment based strictly on the continuous attachment avoidance and anxiety dimensions. Although this recommendation makes sense from a methodological and statistical standpoint, many researchers continue to report results for the attachment styles because, as didactic devices, the styles communicate meaning in a simple way that makes intuitive sense to most readers.

As attachment theory continues to garner attention and grow across the coming decades, researchers and applied psychologists should continue to develop interventions and programs that promote the internalization of secure working models while increasingly taking into account cultural, gender, and age-related differences. Promoting secure attachment should translate into better achievement and mental-health outcomes for individuals as well as organizations, and attachment research may provide invaluable information on how to foster and promote the development of other positive psychology traits and attributes.

SEE ALSO: ► Adult attachment security ► Hope ► Optimism  
► Self-efficacy ► Social support

## Attribution Theory

Christopher Peterson<sup>a</sup> and Nansook Park<sup>b</sup>

<sup>a</sup>University of Michigan; <sup>b</sup>University of Rhode Island

On an ongoing basis, people pose and answer questions about the causes of events, and the study of people's beliefs about causes has concerned psychologists for decades. A *causal attribution* is a belief about the cause of some event. The term *attribution* makes it clear that a particular explanation may or may not be

correct. What matters is that the person regards his or her causal attributions as true, and then acts accordingly. The attempt to explain the role played by causal attributions in social behavior is called *attribution theory*, of which several versions exist.

## Attribution Theories

The first attribution theory emerged from Fritz Heider's descriptions of how people explain events in their everyday lives, particularly actions by others. The judgment that a given action was intentional or not is critical, according to Heider, and this judgment is often made by deciding whether people's behavior reflects their inner characteristics or the situational demands. In the former case, the theory addresses *internal attributions* and regards the behavior as intentional; in the latter case, it addresses *external attributions* and behavior regarded as unintentional.

Some psychologists have observed that the internal–external distinction makes most sense in Western cultures that exalt individuality and oppose the person and the world. In cultures that emphasize groups, for example India, causal attributions tend to be phrased in terms of the relationships between people, which include both internal and external factors.

Another version of attribution theory is Harold Kelley's account of how people arrive at a particular causal attribution for some event. Kelley's attribution theory prescribes how a reasonable person interested in the truth should think. Kelley suggested that people proceed exactly as a scientist would, by gathering information about how different factors relate to the event in question. To the degree that the presence or absence of a factor is associated with the subsequent occurrence or nonoccurrence of the event, then it is a likely cause.

For example, if a student is trying to explain why she performed poorly on a midterm exam, she would think of all the factors that might have influenced her performance on this exam and others. She decides that the only factor that consistently distinguishes good performances from bad performances is the amount of time devoted to reviewing course material. That becomes the causal attribution, and the process is clearly a rational one.

Another well-known attribution theory was proposed by Bernard Weiner, who proposed that causal attributions can be described along two independent dimensions: internal (pertaining to the self) versus external (pertaining to the situation) and stable (chronic) versus unstable (transitory). Yet another attribution theory is that of Carol Dweck, who was interested in children's beliefs about their own intelligence – whether intelligence is a fixed entity or is something more malleable.

Causal attributions affect how individuals respond to events. For instance, motivation is influenced by how one explains events. Suppose a student earns a D on a midterm examination in Spanish. He or she might attribute this outcome to an internal stable characteristic: "I have no ability at language." Or he or she might explain a poor grade with an unstable cause, saying: "I didn't study enough."

In the latter case, the student expects to do better on the final exam and hence prepares for it. In the former case, the student expects no change in his or her performance and does not bother studying at all.

Our emotional reaction to events is also influenced by how people explain them. In general, successes make people happy, whereas failures make them sad. But within these overall emotional reactions, attributions shape particular feelings. To the degree that they explain a success in terms of ability and effort, people feel pride. To the degree that they explain a failure in terms of task difficulty or bad luck, people preserve their own self-esteem.

The tendency to take credit for success but not failure is termed the *self-serving bias*. To call this tendency self-serving is to imply that people are motivated to enhance their self-esteem, but it is possible to explain this bias solely in terms of the information available to a person. When people undertake an activity at which they believe themselves competent, they expect to succeed. When they do succeed, explaining it in terms of their own characteristics makes sense. In contrast, when they fail, they look outside themselves and explain it in terms of external factors. Motivation is not responsible for the difference in how we explain our successes and failures – just the different information to which we pay attention.

There exist other attributional tendencies as well. One pervasive phenomenon in the United States is the tendency to explain other people's actions in terms of their internal characteristics: needs, drives, and traits. "Look at him carrying on over there! He must not have any inhibitions." People overlook the possibility that situational forces may be influencing his behavior. This tendency is sometimes called the *fundamental attribution error*.

When asked to explain personal behaviors, people more readily refer to environmental demands and influences. "I really carried on! The music was so loud that it put everyone in a great mood." The difference between how people explain their own behaviors versus how they explain the observed behaviors of other people is called the *actor-observer effect*. It is also widespread in the United States. For example, attributions made by employees and managers for employee absenteeism show the expected actor-observer differences. Employees excuse their own absences by citing extenuating circumstances, whereas employers interpret the same absences in terms of employee characteristics like laziness.

Whether or not causal attributions are strictly accurate, they are influenced by features of the events that being explained. Another influence on the sorts of causal explanations a person offers is *attributional style*, also called *explanatory style*, a cognitive personality variable that reflects how people habitually explain the causes of events that occur to them.

## Attributional Style

The notion of attributional style emerged from the reformulation of the learned helplessness model of depression, where it was proposed as a distal influence on

the extent of emotional, cognitive, and behavioral deficits following experience with uncontrollability. Individuals who explain uncontrollable bad events in pessimistic terms, with causes that are internal ("it's me"), stable ("it's going to last forever"), and global ("it's going to undermine everything I do"), are hypothesized to experience greater disruption and more helplessness following uncontrollable bad events than their more optimistic counterparts, who offer external, unstable, and specific causal explanations.

Attributional style is measured with a self-report questionnaire that asks respondents to imagine good or bad events happening to themselves, to write in their own words a causal explanation for each event, and to rate the attributed cause along the dimensions of internality versus externality, stability versus instability, and globality versus specificity. Attributional style can also be measured by content analyzing written or spoken material in which good or bad events are described and explained. This assessment strategy is dubbed the CAVE technique, an acronym for the Content Analysis of Verbatim Explanations. However assessed, optimistic explanatory style has been linked to positive mood and good morale, to perseverance and effective problem solving, to achievement in a variety of domains, to popularity, to good health, and even to long life and freedom from trauma. In contrast to these benefits of an optimistic attributional style is the finding that individuals who offer optimistic explanations for bad events tend to underestimate their future likelihood.

A great deal is known about the consequences of an optimistic versus pessimistic style of explaining the causes of events. Less is known about the origins of explanatory style. Unaddressed by any study is whether the typical person is an optimist, a pessimist, or simply neutral. That is, whether something unusual in the course of development needs to occur in order to impart to someone an optimistic explanatory style; whether optimism is the developmental default, deep-wired into human beings by evolution or pessimism is the default. Perhaps the child is a blank slate, equally able to become an optimist or a pessimist, depending on the influences to which he or she is exposed.

Attributional style changes from pessimistic to optimistic during the course of cognitive therapy for depression, and this change occurs in lockstep with the alleviation of depressive symptoms. Intervention programs that teach individuals to offer more optimistic explanations for bad events effectively prevent future episodes of depression. Many researchers have been drawn to the study of pessimism and its consequences, although it is not clear if they are assuming that optimism needs no special explanation or instead that pessimism is a more pressing concern. Regardless, positive psychologists need to be concerned with how optimism and pessimism develop. We can assume neither that optimism is the simple opposite of pessimism nor that the determinants of optimism can be identified from the study of the determinants of pessimism.

In most attributional style research, the focus is on outcomes of interest to the learned helplessness model: depression, illness, and failure. These are important, but the typical way of measuring these outcomes assigns zero points that

correspond to *not* being depressed, *not* being ill, and *not* failing. This limitation can be glossed over by researchers describing what their data show. For example, if researchers find that pessimistic individuals are depressed and physically ill, they may summarize this result by saying that optimistic people are happy and healthy, even if the outcomes measures did not allow people to manifest happiness or health.

Perseverance is not the absence of helplessness, happiness is not the absence of depression, and health is not the absence of illness. But somehow these obvious points can be ignored when attributional style researchers interpret their findings. So long as outcome measures reflect only degrees of pathology, no conclusions can be drawn about well-being. This is an important lesson for positive psychology. It is not enough to study positive predictors like optimistic attributional style; one must additionally study positive outcomes or – even better – outcomes that range from negative to positive. Only with this strategy will there be a complete positive psychology.

SEE ALSO: ► Goals and goal-setting theory ► Learned optimism  
► Locus of control ► Optimism ► Penn Resiliency Program

## Authentic Happiness

Tayyab Rashid

*University of Pennsylvania*

*Authentic happiness*, scientifically at best is an unwieldy concept. For ages sages and scientists have often considered it an inherently subjective, relative, fleeting and hence unmeasurable notion. Greek philosophers such as Socrates, Plato, and Aristotle essentially emphasized that the pursuit of a virtuous life makes one authentically happy. Utilitarians such as Bentham, following Epicurus, have argued that the presence of pleasure and absence of pain constitutes authentic happiness. Recent strides in happiness research have uncovered many secrets regarding what makes people authentically happy. First, roughly half of happiness is genetically influenced, if not determined. Second, life circumstances such as money, state-of-the art electronic and digital gadgets, safer neighborhoods, sunnier climes, gender, race, education and even objectively measured health status together add not more than 10% to the total tonnage of happiness. Third, people grossly overestimate the importance, intensity and duration of happiness derived from these factors. In particular, people systematically overestimate the amount of happiness extra money will bring them. In addition, larger cultural ethos, capitalistic zeitgeist and media influence perceptions and expectations about money and happiness. People devise complex cognitive reasoning to justify spending disproportionate amounts of time, energy and behavioral efforts in attaining more money and these resources – little realizing that gains from these are ephemeral.

At the millennium, compared to five decades prior, people earn significantly more money, live longer, have more social and civic liberties, have cured many diseases previously thought to be incurable – yet are not any happier. In fact, people are more depressed. It seems that authentic happiness remains a paradox. Some theoretical insights well supported by empirical research have tried to untangle this paradox. Human beings are phenomenally adaptable creatures. According to hedonic treadmill theory, once basic needs are met, additional material resources tend to have diminishing effect on happiness. Most lottery winners and recently turned quadriplegics adapt and return to their base level of happiness within six-months. The wealthiest few are slightly happier than average individuals are and in some cases, are unhappy indeed. In addition, people do not just adapt; they compare too. After achieving one goal, people compare themselves to where they want to be and with other individuals. As people attain the next goal, they recalibrate, creating another one for themselves and then just keep on changing the goalposts. Thus, adaptation, comparison and recalibration of material goals prevent people from enduring authentic happiness.

If socially desired, clearly defined, practically attainable material goals do not add to authentic happiness, what does then? Material resources, although ephemeral, are nonetheless important building blocks of authentic happiness. They satiate the senses and provide pleasure, which is quintessential to happiness. Seligman proposes that authentic happiness is a blend of hedonic and eudaimonic elements. He parses authentic happiness into three scientifically manageable components: the pleasant life, the engaged life and the meaningful life.

The pleasant life successfully pursues positive emotion about the present, past, and the future. The positive emotions about the past are satisfaction, contentment, and serenity. Optimism, hope, trust, faith, and confidence are future-oriented positive emotions. Positive emotions about the present are divided into two categories: pleasures and gratifications. The pleasures are momentary positive emotions, which satisfy the senses such as delicious tastes and smells, sexual feelings, moving the body well, delightful sounds and sights. Some are higher pleasures which are usually set off by more complicated and more learned mechanisms such as ecstasy, rapture, thrills, bliss, gladness, mirth, glee, fun, ebullience, comfort, amusement, relaxation, and the like. Pleasures are inherently subjective, and people habituate to them quickly. The gratifications are higher-order pleasures. These involve more intentional activities such as cooking, reading, writing, and dancing. The pleasant life is important because positive emotions change people's mindsets, widen the scope of their attention and broaden their thought-action repertoire, leading to increased happiness. Moreover, positive emotions contribute to resilience in crises and promote physical health. Contrary to the notions that positive emotions are merely derivative, defensive, or mere illusion, empirical evidence has suggested that positive emotions are real and valued in their own right. For example, the left prefrontal cortex in the brain has been associated with positive emotions. Authentic happiness, however, is not the experience of more intense positive emotions, rather it is mild-to-moderate positive emotions experienced more

frequently. One lesson from happiness research is that if people seek ecstasy much of the time, whether it be in a pastime, at work, or in relationships, they are likely to be disappointed as intense positive emotions are rare and present sharp contrast to more prevalent neutral and mildly pleasant emotions. In addition, pursuit of positive emotions does not mean Pollyannaish negation of negative emotions which serve many adaptive functions. To be authentically happy, one needs to strike a careful balance between the benefits of seeing a glass as half-empty and the advantages of seeing it as half-full since a utopian life completely devoid of pain perhaps will never be possible. The happiest individuals sometimes feel sad, and the saddest have their moments of joy. Authentic happiness thus is not static; it is dynamic and the secret lies in balancing its dynamics.

The second component of happy life in Seligman's theory is the engaged life, a life that pursues engagement, involvement, and absorption in work, love, and leisure. To pursue engagement, Seligman recommends creating *flow*, which is Csikszentmihalyi's term for the psychological state that accompanies highly engaging activities. Time passes quickly. Attention is completely focused on the activity and the sense of self is almost lost. Seligman recommends that one way to enhance engagement and flow is to identify people's highest character strengths and then help them to find opportunities to use these strengths more. He calls them *signature strengths*. This view resonates with Aristotle's *eudaimonia* and Maslow's *self-actualization* and *peak experiences*. One way to obtain gratifications, noted in the pleasant life, is to engage in activities that use one's signature strengths. Any thing from everyday, ordinary, normative, human experiences such as playing with a child, pottery, baking, painting, reading, focused listening and talking, socializing, making a slam dunk, helping others, savoring natural or artistic beauty, or rock climbing can create flow and fully engage a person. These activities do not necessarily rely heavily on modern digital gadgets and often involve long-cuts rather than short-ones, requiring a lot of thinking and interpretation. Compared to the pursuit of sensory pleasures which fade quickly, these activities last longer and do not habituate easily since these activities are temporary and offer numerous creative avenues. Engagement is a good candidate for authentic happiness because it brings focus to the process which is often more important than final outcome or accomplishment. In pursuit of authentic happiness, people probably want to *do* things which are deeply fulfilling and in doing so, want to *be* the certain sort of individuals they always aspired to be. Endeavors which use the highest strengths, talents and abilities are one of the best ways to be authentically happy, and perhaps explain 40% variance in the pie of authentic happiness.

The third component of authentic happiness in Seligman's theory is the meaningful life. It consists of attachment to, and the service of, something larger than oneself. People want to make for themselves a life that matters to the world and create a difference for the better. Victor Frankl observed that happiness cannot be attained by wanting to be happy – it must come as the unintended consequence of working for a goal greater than oneself. There are a number of ways to achieve a meaningful life: close interpersonal relationships, generativity, social activism or

service, and careers pursued as calling and missions. Institutions such as church, synagogue, mosque, temple, a professional association, leisure or sports club, a nonprofit organization, an environmental or a humanitarian group – all offer opportunities to connect with something larger. Regardless of the particular way in which a person establishes a meaningful life, doing so produces a sense of satisfaction and belief that life is well-lived. An important part of the meaningful life is social interaction. Countless studies document the association between close social ties and happiness. People who have close friends and confidants, friendly neighbors, and supportive coworkers are less likely to experience depression, low self-esteem, and health problems. Married people are consistently happier than people who are unattached, all else being equal. Similarly, religiously involved people are happier than their irreligious counterparts. Research, however, has not established a definite causal chain. For example, it is unclear whether marriage makes people happier, or happy people are likely to marry. Similarly, religious faith may lift the spirit or the community aspect of religious activities may promote happiness. Whether it is the close family, friends, community, or faith, the most salient feature shared by the 10% of the happiest people is a strong interpersonal life. These three lives are neither exclusive nor exhaustive. Activities such as writing or teaching could produce pleasure, engagement and meaning simultaneously. Nevertheless, these provide a useful conceptual framework to understand scientifically tested ingredients of authentic happiness. Authentic happiness, Seligman argues comes from the full life which consists of experiencing positive emotions, savoring positive feelings from pleasures, deriving abundant gratifications by using one's signature strengths, and creating flow and engagement through them as well as pursuing a meaning in life in the service of something larger than the self.

Much like specific psychological disorders can be treated, several lines of research are beginning to demonstrate that happiness, in terms of specific positive emotions and strengths, can be systematically enhanced. Despite causalities of genes and disadvantaged childhoods and introvert personality disposition, if one pursues a moderate amount of sensory pleasures, uses strengths and talents more often at work, in leisure, and in love, invests time and energy in family, friends, and community, does acts of kindness, counts blessing regularly, savors joys of life, experiences aesthetic and moral awe, lets go of anger and resentment and learns to forgive, takes care of body and intentionally engages in activities which yield pleasure, gratification, flow, engagement and meaning – authentic happiness may not be such an elusive pursuit, after all.

As the scientific pursuit of authentic happiness advances, many yet unknown routes will be discovered. For instance, researchers so far have mostly followed correlational lines. Causal, longitudinal, and prospective pathways have not been pursued to uncover individual differences, precise conditions, and proportions more conducive to authentic happiness: seeds which could be planted early on to foster it and variables which could safeguard it against habituation. Moreover, future research also needs to demonstrate authentic happiness contribution to physical health, academic and work success, gross national product, and whether



it effectively buffers against crimes, drugs, delinquency, and stress. Furthermore, how important factors like culture and sociopolitical conditions mediate authentic happiness is largely uncovered yet.

SEE ALSO: ► Eudaimonia ► Meaning ► Positive emotions  
► Seligman, Martin ► Utilitarianism ► Well-being

## Authenticity

Kennon M. Sheldon

*University of Missouri – Columbia*

*Psychological authenticity* refers to emotional genuineness, self-attunement, and psychological depth. To be authentic is to live with one's whole being in the moment, without guile or hidden agendas. Although the concept of authenticity is a mainstay within humanistic theory and many kinds of psychotherapy, surprisingly little empirical research has focused on it, perhaps because of its abstraction and the philosophical difficulties it poses. Some historical and theoretical context is provided below, followed by consideration of contemporary empirical research relevant to authentic functioning.

### Historical Background

The concept of psychological authenticity became prominent only recently in Western culture, because the concept of the psychological self, upon which the concept rests, emerged only within the last 500 years. The rise of the scientific method and the erosion of traditional class-based role structures in the enlightenment era promoted awareness of the self as a thinking agent somewhat independent of its environment (*cogito ergo sum*), and the romantic era went further by promoting self-discovery and the idea that the self is the hero of an important personal drama. However, the subsequent appearance of the Darwinian and Freudian perspectives suggested that this inner self can be radically self-deceived and inauthentic, a view also endorsed by the behaviorist perspective that dominated in the middle twentieth century. On the current scene, evolutionary, sociological, cultural, and cognitive perspectives upon human nature continue to evoke doubt concerning the possibility of true authenticity, arguing that we are inescapably motivated by social forces, self-serving interests and nonconscious processes. Also, to endorse the concept of authenticity may veer dangerously close to endorsement of an inner homunculus (i.e., little man in the head), long taboo in scientific theory. Even commonplace folk expressions raise difficult philosophical questions. "Be true to your self," people say, but it is unclear what the self is being true to, when it is being true to itself. "Be yourself," people say,

but it is unclear how the self could *not* be itself. Perhaps these statements are nonsensical.

Before addressing these questions, an appropriate definition of *self* is first needed. It has been suggested that the self is a mental representation of the underlying organism, an online simulation being run within the psyche. In somewhat different terms, the self is a lived character in an unfolding personal drama, one which is constantly being updated within the organism's brain. The conscious self is in an important sense a phenomenal fiction, both in that the content of the dominant self-narrative can be somewhat arbitrarily or randomly determined, and in that the self-narrative may be an inaccurate or even inadequate simulation of the underlying organism's actual condition. Rather than being powerless, however, this fiction has several important functions. In addition to supplying a more or less accurate read-out of the current state of the system, the self also supplies high-level goals and standards for the action system, supplies animated personae for effective social interchange, and supplies defenses against anxiety and mortality.

With this definition in mind, let us consider some theoretical and empirical attempts to conceptualize and legitimate psychological authenticity. The concept was given its most important expression by the humanistic and third force psychologists of the 1950s and 1960s. Rogers (1961) defined authenticity (or *congruence*) as occurring when "the feelings the person is experiencing are available to him, available to his awareness, and he is able to live these feelings, be them, and is able to communicate them if appropriate" (p. 61). Feelings can be subtle and difficult to detect online, and Rogers argued that they may be obscured precisely because people are committed to self-images inconsistent with these feelings. Thus, ironically, the conscious, cognitive self may be the very cause of its own deeper blindness or inauthenticity. Rogers' perspective also shows what it may mean for the conscious self to fail to be itself, or to be true to itself – specifically, the conscious self-character may fail to apprehend and express the more subtle thoughts and feelings occurring within its own organism and brain. An important Rogerian assumption is that societal failings and inadequate nurturing can push people to adopt false or inauthentic selves. Accordingly, Rogers argued that optimal therapeutic outcomes occur when therapists are able to accept their clients unconditionally. Also important is the therapist's ability to contact and appropriately express his or her own subtle feelings and reactions, modeling this process for clients and showing them how to go about integrating the new insights that emerge in therapy. This humanistic model of therapeutic change and the optimal helping relationship still predominates within typical counseling practice.

Despite the intuitive appeal of Rogers' ideas, they received little empirical scrutiny at the time. However, similar ideas have been developed within contemporary research psychology, under the aegis of self-determination theory (SDT). SDT is an organismic/dialectical theory built on the idea that people have inherent interests and passions that motivate behavior for its own sake (*intrinsic motivation*). Of course, not all important behavior can be enjoyable, and thus the

theory expanded to incorporate *identified motivation*, in which nonenjoyable behavior is nevertheless undertaken willingly because it expresses important identities and beliefs. Both intrinsic and identified motivations are said to be *autonomous* motivations, because both express the interests of a deeper, enduring self. In contrast, controlled motivations evoke behaviors that feel caused by the situation, or by unmastered introjects that overwhelm the person's sense of self. These ideas supply an interesting possible definition of authenticity – that it involves acting for reasons of interest and/or conviction, rather than with a sense of being compelled by uncontrollable forces.

The self-concordance model applied SDT to the domain of self-generated personal goals. The list of possible personal goals is infinite – people can choose to strive in countless directions. However, time and energy are very finite resources, and thus people can select only a very small set of goals from among the myriad of possibilities. This makes self-appropriate goal selection a crucial skill. Sheldon and colleagues showed that those who pursue goals for reasons of interest and identification rather than for reasons of pressures or guilt gain many functional benefits and as a result are higher in many forms of psychological well-being. Sheldon argued that because self-concordant goals properly represent the personality, attaining them nurtures the personality and satisfies its needs. In contrast nonconcordant goals, which are based on false self-premises and beliefs, may do people no good even when they are attained. From the self-concordance perspective, then, to be authentic is to select and pursue long-term life objectives and purposes that one really believes in and enjoys.

Other empirical approaches to authenticity also exist. For example, Sheldon, Ryan, Rawsthorne, and Ilardi compared true self and trait self-conceptions of optimal functioning, showing that feeling authentic and self-expressive within various life domains (such as student, child, friend, and romantic partner) predicted positive functioning within those domains, above and beyond the influence of the Big Five trait profiles expressed within those domains. More recently, Kernis and colleagues have presented a four-component conceptualization of authenticity, involving *awareness* of one's motives, feelings and desires, *unbiased* (i.e. non-defensive) *processing* of internal information, *behavior* consistent with one's values, preferences and needs, and a *relational orientation* in which one values openness and truthfulness in interpersonal relationships, even if it means letting others see unflattering sides of oneself. The consistency of this view with the Rogerian and self-determination theory perspectives, outlined above, should be clear. The Authenticity Inventory is specifically designed to measure these four facets of authentic functioning, and has already shown itself to be useful in predicting a variety of positive outcomes.

In sum, the ability to create, live in, and project a self-character, both to oneself and to others, may be one of the most defining human attributes – an attribute which allows us to make our way through the complex mental and social worlds in which we find ourselves. However, emerging research suggests that not all self-characters are equally successful at representing the entirety of the personality in

which they emerge. This ability, in conjunction with a commitment to express what is found moment-to-moment and also a commitment to treat others with caring and respect, appear to be defining characteristics of psychological authenticity. Notably, the Rogerian psychotherapy model discussed above suggests that authenticity is a skill, which people can develop over time. In other words, we can learn to create and live in selves that better express who we are, and better connect us to others.

The concept of psychological authenticity is an important one for positive psychology, because it epitomizes positive psychology's quest for the good, and also epitomizes positive psychology's need to put this quest on firm conceptual and philosophical footings. The concept of authenticity is also crucial for understanding the meaningful life, the most subtle but potentially important form of optimal functioning identified by Seligman.

SEE ALSO: ► Actualizing tendency ► Autonomy ► Rogers, Carl  
► Self-determination

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## Autonomy

Guy Roth<sup>a</sup> and Edward L. Deci<sup>b</sup>

<sup>a</sup>*Ben-Gurion University of the Negev*; <sup>b</sup>*University of Rochester*

The concept of human autonomy has been an important and controversial one in the history of Western thought, particularly within the traditions of philosophy and of clinical and developmental psychology. *Autonomy*, which means to be self-governed, stands in contrast to *heteronomy*, which means to be governed by forces alien to the self. Autonomy has been variously portrayed both by its advocates, who at times have used different terminology to refer to the concept that we understand as autonomy, and by its adversaries, who at times have used the term autonomy to refer to different concepts.

Within philosophy, writers such as Kant, Hume, and Mill have disagreed about such matters as the centrality of emotion versus reason in the determination of behavior, while essentially agreeing with the view summarized by Pfander that autonomy means self-determination, or acting from one's "center," with the experience of choice and in accord with one's deeply held values, interests, and desires.

Within clinical psychology, the psychoanalytic tradition has emphasized the importance of regulation by the observing ego and has essentially aligned autonomy with acting from a true, as opposed to false, self. Developmental psychologists such as

Piaget have studied the organizational process and its resulting cognitive structures, which can be understood as providing the basis for autonomy.

In general, within these different approaches, the concepts have evolved from reasoned thought and systematic observations, but the approaches have failed to provide the means for an empirical or scientific examination of autonomy and closely related concepts. It was the work of Heider and deCharms that set the stage for a vigorous empirical examination of autonomy.

Heider, in his naïve psychology, emphasized the difference between *personal causation*, which is based in intentions, and *impersonal causation*, which is based in forces beyond the actor's control. deCharms, working with Heider's conception, differentiated two types of personal causation – namely, internal causation in which actions emerge from factors internal to the person, and external causation in which actions results from external forces acting on the person.

With this as a starting point, Deci and Ryan and their colleagues have engaged in a wide array of research programs, using both laboratory and field methods, to investigate many aspects of human autonomy. Self-determination theory (SDT), which has both emerged from this research and in turn guided it, encompasses the most extensive empirical examination of human autonomy within psychology.

## Personal Autonomy in Self-Determination Theory

SDT views personal autonomy as one of three basic psychological needs, along with the needs for relatedness and competence, which are posited to be universal among humans. Basic psychological needs are defined as a necessary psychological nutrient for optimal development and psychological health. The need for autonomy concerns people's universal desire and urge to regulate their own behavior, act in accord with their interests and values, and behave in ways that they endorse at the highest level of their reflective capacity. The term autonomy refers not only to this basic need but also to the process of regulating one's behavior with a sense of choice and volition, what deCharms referred to as an *internal perceived locus of causality*.

SDT researchers have used a motivational approach to examine various aspects of human autonomy. More specifically, they have investigated intrinsic and extrinsic motivations, considering the degree to which the various forms of motivation represent autonomy.

*Intrinsically motivated behaviors* are performed out of interest in the activity itself and the inherent satisfaction that results from doing it. As such, when intrinsically motivated, the perceived locus of causality is invariantly internal and the activity is said to be autonomous. Indeed, intrinsic motivation is considered the prototype of autonomous activity. Such actions are experienced as volitional, spontaneous self-expression.

*Extrinsically motivated behaviors* are defined as those for which the behavior is not satisfying in its own right but rather is instrumental to some operationally

separable consequence. In other words, such behaviors are means to an end rather than ends in themselves. In their comprehensive 1985 book, Deci and Ryan suggested that extrinsically motivated behaviors vary in their degree of relative autonomy. In fact, the theory has proposed four types of extrinsically motivated behaviors that vary in their degree of relative autonomy because the regulation of these behaviors has, to differing degrees, been internalized and integrated with one's sense of self.

When instrumental motivation for an activity has *not* been internalized, so the person behaves in response to an external, coercive, or seductive contingency, regulation of the behavior is said to be *external*. That is, the external contingency controls the behavior, so the behavior is nonautonomous and the perceived locus of causality is external.

The first type of internalization, which is the least effective, is referred to as *introjection*. It involves taking in a behavioral regulation, with its implicit value, but not accepting it as one's own. Instead, people apply to themselves the contingency of approval or worth that had initially been external and applied by others. When a regulation has been introjected, people feel an inner compulsion to enact the instrumental behaviors. Such behaviors are thus controlled by contingencies even though those contingencies are now within the people. A second, fuller type of internalization is called *identification*. Here, people have identified with the importance of the activity for themselves, and thus their motivation to perform the behavior is relatively autonomous even though they do not find the activity interesting. Finally, when that identification has been reciprocally assimilated with other aspects of people's sense of self, *integration* has occurred. Integrated regulation is an autonomous form of extrinsic motivation.

In sum, identified and integrated forms of extrinsic motivation, along with intrinsic motivation, are the bases for autonomous actions, whereas external and introjected forms of extrinsic motivation are the bases for controlled or non-autonomous behaviors. Because these autonomous actions emanate from people's sense of self, such that their true interests and values are the guides for the behaviors, people who are behaving autonomously are being *authentic*.

Considerable research indicates that autonomous motivations tend to be associated with positive consequences, such as greater creativity, flexibility of thought, effective problem solving, and psychological health. Nonautonomous motivations tend to be associated with negative psychological consequences, including poorer performance on heuristic tasks, more maladaptive behaviors, and lower psychological well-being.

## Other Definitions of Autonomy

Autonomy can have other definitions beyond that of volition and self-governance, and psychologists have at times used these other definitions in their discussions of autonomy. We briefly consider three.

### Autonomy as Independence from Others

Oishi, among others, equates autonomy with independence from, or not relying on, others. According to this view the opposite of autonomy is dependence, which means turning to others for support. SDT, however, treats autonomy and independence as conceptually orthogonal. The theory maintains that it is possible to be either autonomously independent of others or autonomously dependent on them, just as it is possible to be heteronomously independent or heteronomously dependent. For example, people can quite volitionally be dependent on a partner for help with some task, or they can choose to do it quite independently. As well, they can feel forced either to take someone's help or to do the task with no help. We suggest that the experience of autonomy versus heteronomy is more important as a predictor of psychological well-being than is the experience of independence versus dependence.

The conceptual distinction between autonomy and independence is important in relation to theories of gender and cultural difference. Various writers have devalued the importance of autonomy and treated it as a masculine or Western phenomenon that should predict positive psychological consequences only for males in a Western society where independence is socially endorsed. This viewpoint may have some merit when autonomy is viewed as independence. However, Chirkov and his colleagues have shown that this viewpoint is wrong when autonomy is understood to mean volition, because across cultures, the extent to which people internalize and integrate cultural practices and values, thus embracing them autonomously, is strongly related to their mental health. Indeed, theorists who have confused independence with autonomy and argued against SDT's emphasis on autonomy have implicitly, though surely inadvertently, endorsed the subjugation of women and non-Western people.

### Autonomy as a Stage

Various writers such as Erikson have portrayed the struggle for autonomy as being primarily evident at, or restricted to, particular developmental stages. These perspectives emphasize the importance of people's striving for autonomy, but they localize the struggle to specific developmental periods. When examined carefully, however, these theories also use the concept of autonomy to mean something other than volition, for example, being oppositional.

### Autonomy as Independence from Environments

In his social cognitive theory of agency Bandura defined autonomy as an action that is entirely independent of the environment. Bandura thus portrayed autonomy as an empty concept, because people are always behaving in relation to environments that undoubtedly play some role in their behavior. SDT, of course, gives environmental supports an important role in promoting autonomy, so within SDT autonomy does not imply acting independently of the environment. As such,

Bandura's view of autonomy does not in any sense negate the importance of autonomy as volition; it merely defines autonomy differently. As pointed out by Dworkin, and endorsed by SDT, people can be fully autonomous when engaging in a behavior for which the objective source of causation is an environmental input.

## **Antecedents and Consequences of Personal Autonomy**

Much of the research in the SDT tradition has indeed examined factors in the environment that either facilitate human autonomy or, alternatively, diminish it. The work has focused on how the social environment functions either to support or thwart satisfaction of the basic psychological needs, especially the need for autonomy.

Research has shown that people's autonomous motivation may be promoted by autonomy-supportive behaviors enacted by important others such as caregivers, teachers, managers, and romantic partners. *Autonomy support* is defined as the degree to which such socializing agents relate to people (e.g., children, students, employees, and partners) from those people's perspectives; act in ways that encourage choice, self-initiation, and participation in decision making; provide meaningful rationales and relevance; and refrain from using language or other behaviors that are likely to be experienced as pressure toward particular behaviors. Supporting autonomy in these ways has been found to enhance intrinsic motivation, facilitate well-internalized extrinsic motivation, prompt the experience of autonomy and authenticity, and result in effective performance and psychological well-being.

In contrast, substantial research that was reviewed by Ryan and Deci in 2000, has shown that events such as rewards, deadlines, threats, surveillance, and pressuring language tend to be experienced as controlling and thus tend to undermine both intrinsic motivation and the internalization of extrinsic motivation, resulting in poorer performance and ill-being. Research leading to these conclusions about autonomy-supportive versus controlling environments has been conducted with a variety of research methods and in domains as varied as politics, education, work, religion, health care, and aging. The implications of the large body of research devoted to exploring the antecedents and consequences of autonomy are of special importance for parents, educators, managers, therapists, and socializing agents in various other domains of life.

SEE ALSO: ► Agency ► Individualism

## **Aversive Motivational Systems**

Nancy A. Fry  
*University of Kansas*

*Aversive motivational systems* promote avoidant behaviors that seek to avoid punishment or a negative outcome. Aversive and appetitive motivational systems are



thought to be distinct and relatively independent as evidenced by neurophysiological research. This relative independence suggests the two systems are unique processes that are activated by different environmental stimuli and usually result in different outcomes. Every individual can vary as to sensitivity to each system with the level of sensitivity to one system not directly related to or predictive of the level of sensitivity to the other system. This can result in a multitude of diverse appetitive/aversive combinations among individuals.

Gray's theory of motivation posits an aversive behavioral inhibition system (BIS) in response to punishment, nonreward, or novelty cues and an appetitive behavioral activation system (BAS) in response to reward or nonpunishment environmental cues. BIS activation is suggested to inhibit movement toward goals and to generate negative emotions such as fear, anxiety, sadness, and frustration. Research has often associated negative affect with higher levels of BIS sensitivity. More recently, it has been suggested that whereas anxiety is associated with higher BIS scale scores, anger, sadness and frustration are associated with nonreward efforts related to BAS subscales. This is an interesting extension of Carver and Scheier's hypothesis of the bipolarity of affect dimensions, suggesting that both positive and negative affect are associated with appetitive systems and with aversive systems but that they take on different characteristics depending on the system.

Carver and Scheier's self-regulatory model posits discrepancy-enlarging (aversive) and discrepancy-reducing (appetitive) feedback loop systems. Discrepancy-enlarging systems appear to promote deviance from reference groups or from undesired selves. These feedback processes attempt to increase the distance from an anti-goal through avoidant, withdrawal, or escape behaviors. *Anti-goals* are those values which one tries not to embody and could represent a feared or disliked possible self. Anti-goals can also be things one tries to avoid such as getting fired from a job, getting a failing grade in a class, or getting a traffic ticket. Carver and Scheier suggest that at some point, moving away from a certain goal in a discrepancy-enlarging feedback loop will bring one closer to a positive goal. This initiates a discrepancy-reducing feedback process moving toward that desired goal and both systems are active simultaneously. They suggest this is what happens in Higgins' notion of resolving the actual-ought discrepancy as the individual seeks to avoid the disapproval of others and moves toward conforming to the duty or responsibility.

Consistent with the view of bipolar affective dimensions, as one performs well in discrepancy-enlarging behaviors and moves away from anti-goals, emotions reflect relief and security (positive affect). Conversely, if one is not doing well in avoiding anti-goals it is likely to result in increased fear, anxiety, and guilt (negative affect). The perception that one's feared self is relatively near has also been shown to be a predictor of depression.

In another model of self-regulation, Higgins posits a regulatory focus theory that involves the adoption of either a promotion (appetitive) or prevention (aversive) regulatory focus depending upon the survival needs to be addressed. A prevention focus stems from security-related concerns and the absence or presence of negative outcomes. In addressing the need for safety and protection,

this regulatory state focuses on *ought* goals such as duties, responsibilities, and obligations. Whereas these are positive goals, the process for attaining these goals involves trying to avoid a punishment such as another's disapproval. Attainment of these goals (absence of negative outcomes) results in quiescence-related emotions such as relaxing or calm. Nonattainment (presence of negative outcomes) results in agitation-related emotions such as unease or tension.

Regulatory fit theory matches an individual's regulatory state with the strategic means of accomplishing that goal resulting in enhanced motivational strength and improved goal performance. For prevention-focused individuals, this requires a vigilance-related strategy. An example of a vigilance-related strategy might be to imagine a negative situation and then try to avoid it. An individual's predominant regulatory state may also be temporarily manipulated by the environment in order to achieve regulatory fit. One way of eliciting a prevention focus is to frame goals in terms of nonloss or loss. Dependant on the regulatory state of the individual either as trait or state and/or how goals are framed, almost any goal can assume either a prevention or promotion focus.

Another motivational system concerned with avoiding the disapproval of others is that of performance-avoidance orientation. More specifically, individuals with higher levels of this aversive type of goal orientation (i.e., how one approaches a goal or task in an achievement situation) may adopt avoidant behaviors in order to inhibit others from negatively judging their competencies when compared to others. They incorporate a fixed view of their ability, believing their ability level is static and that no amount of effort will improve their performance. Their perception is that people with ability don't have to work hard to accomplish goals and therefore, expending effort is an indication of a lack of ability.

Individuals with a higher performance-avoidance orientation tend to set lower goals where they feel more certain of success and are more likely to avoid any potential negative evaluation of their ability. Since effort is believed to be an indicator of low ability, they have a tendency to give up easily and to view errors and failure as further indicators of low ability. Self-evaluation and feedback are avoided so as not to risk being confronted with negative information from either internal or external sources. In trying to maximize their performance, these individuals may employ a surface processing method of learning such as rote memorization. This inhibits the ability to understand the underlying concepts which in turn inhibits the ability to generalize information to new problems and situations.

A similar concern with other people's potential negative evaluation is found in Gable's model of social motivation. This theory posits that individuals with avoidance social motives and goals are fearful of rejection and conflict with others. These avoidance systems seek the absence of negative outcomes or security. Pleasing relationships and social interactions are characterized as those which lack anxiety, uncertainty, or disagreements. Conversely, negative outcomes are present in painful relationships and interactions. Whereas attempts are made to avoid these negative social outcomes, research findings suggest that social-avoidance goals predicted greater loneliness, less relationship satisfaction, fewer positive social events, and

a stronger impact of negative events (i.e., differential reactivity process). A study of friendship-avoidance goals showed similar results and also predicted an increase in reported physical health symptoms over time. Social motivation research has found that individuals with greater rejection sensitivity are more anxious, less confident, and judged more negatively by others.

Whereas it appears that avoidant social motives and goals are not as effective in achieving the desired results (e.g., less loneliness), some researchers suggest there are certain times when adopting an avoidant approach may be the wise course of action. For example, if a person has abused one's trust in the past, it may be wise to take a more cautious approach to that relationship.

There are some important commonalities among these motivational system theories. First, each motivational theory appears to recognize sensitivity to appetitive and aversive systems as both an individual difference dispositional trait and as an environmental state that can be manipulated to present either reward (appetitive) or punishment (aversive) signals. This ability to deliberately change the environment has some important implications. For example, manipulating the environment (i.e., instructions, feedback) to obtain regulatory fit between the individual and the means of achieving goals results in maintaining motivational strength and improved performance. Higgins suggests regulatory fit can be used by both policy-makers and researchers in designing campaigns to modify behavior.

Generating interest in the areas of education and business professional training is the manipulation of classroom or training environments to reflect learning goals (i.e., appetitive type of goal orientation). By presenting learning goals, individuals are encouraged to acquire knowledge and skills by learning the deeper, underlying concepts and principles rather than focusing on producing performance-related outcome goals. Understanding concepts promotes the ability to generalize information from one context to the next. Research findings have shown that individuals with an aversive goal orientation improve their performance when given learning goals and that learning goals contribute to translating knowledge to more complex tasks. Whereas the benefits to improving academic performance are fairly evident, businesses are also recognizing that having personnel with the ability to adapt knowledge and skills quickly is imperative in today's dynamic marketplace. It is also a potential cost benefit to companies in saving on professional training costs and to workers, as it improves their own marketability.

Most research has focused on the effects to the individual of either the appetitive system or the aversive system. Given the evidence that the systems are relatively independent, that individuals have some level of sensitivity to both systems, and that activity in one system does not necessarily translate to a lack of activity in the other system, some researchers in the area of goal orientation and social motivation are beginning to examine the interaction effects.

Finally, the appetitive/aversive distinction also appears to influence how individuals process information. For example, individuals with a prevention focus or

high in social avoidance were found to remember more negative information as compared to those individuals with appetitive orientations. Goal orientation is also posited to influence how one interprets information. These findings are similar to studies that suggest affect influences attention and information processing. Given the bivariate nature of both motivation and affect, this similarity is not surprising. This has implications in a wide range of areas including cognitive and social psychology, education, and business.

SEE ALSO: ► Appetitive motivational systems ► Prevention focus

## Awe

Louise Sundararajan

*Regional Forensic Unit, Rochester, NY*

A classical definition of *awe* is Rudolf Otto's formulation of *mysterium tremendum* in response to an overwhelming Other – the “holy.” A scientific model, proposed by Keltner and Haidt, defines awe in terms of perceived vastness and need for accommodation.

The most profound and thorough labour of the intellect, the most assiduous and devoted professional toil, had gone to the construction of the great edifice, making it in all its significance and purposefulness a marvel of human achievement. . . . Utter meaninglessness seems to triumph over richest significance, blind “destiny” seems to stride on its way over prostrate virtue and merit. (Otto, 1970/1923, p. 81)

Rudolf Otto was not referring to the World Trade Center and its destruction in the September 11 tragedy, although he might as well. He was referring to one of the calamities in his own time – the destruction of human lives and the mighty bridge over the river Ennobucht by a raging cyclone. The writer Max Eyth wrote about his visit at the scene of the disaster:

When we got to the end of the bridge, there was hardly a breath of wind; high above, the sky showed blue-green, and with an eerie brightness. Behind us, like a great open grave, lay the Ennobucht. The Lord of life and death hovered over the waters in silent majesty. We felt His presence, as one feels one's own hand. And the old man and I knelt down before the open grave and before Him. (cited in Otto, 1970/1923, p. 81)

This is an example of the phenomena referred to as awe. Corresponding to the two possible versions of any emotion, coarse versus refined (Frijda & Sundararajan, 2007), there are two theories of awe, one proposed by Keltner and Haidt, the other by Otto. These two models of awe are examined in turn.

## A Prototypical Model of Awe

Keltner and Haidt posit that the prototypical cases of awe consist of two central themes: *perceived vastness*, defined as anything that is experienced as being much larger than the self; and *a need for accommodation*, defined as an inability to assimilate an experience into current mental structures. Keltner and Haidt's model also specifies *eliciting situations* consisting of social elicitors (such as powerful leaders), physical elicitors (such as grand vista), and cognitive elicitors (such as grand theory). In addition, the variety of awe-related experiences is hypothesized to be determined by five peripheral or "flavoring" features of the eliciting stimuli: threat, beauty, ability, virtue, and the supernatural. For instance, negative valence is an optional feature of awe, depending on whether the flavoring feature of threat is in the picture – and of all the eliciting-situations, only a tornado is unambiguously assigned the feature of threat. This model is long on the analysis of eliciting-stimuli, but short on the analysis of response – need for accommodation.

A case in point is what Keltner and Haidt refer to as the *primordial awe*. Following Weber and Durkheim, the authors propose that "the primordial form of awe is the feeling a low status individual feels towards a powerful other. This feeling is likely to involve reverence, devotion, and the inclination to subordinate one's own interests and goals in deference to those of the powerful leader" (Keltner & Haidt, 2003, p. 307). To the extent that fearful submission to power is a biologically based response to the cues of social dominance, as the authors have suggested, primordial awe seems to entail successful assimilation much more than accommodation (in the Piagetian sense of adjusting mental structures).

In more drastic scenarios, where there is "a challenge to or negation of mental structures when they fail to make sense of an experience of something vast" (Keltner & Haidt, 2003, p. 304), the trajectory from need for accommodation to prototypical awe is not clearly specified. Failure of assimilation has multiple pathways, some of which might lead to posttraumatic stress disorder (PTSD) instead of awe, for instance. A relevant question is raised by Averill concerning the mystical experience: When their mental structures fail to make sense of the world, "What tips the balance [for the mystic] so that spirituality [or awe in the present context] rather than anxiety or depression is experienced?" (1998, p. 117). Averill speculates that "When cognitive structures are threatened with collapse, a person can seek to escape; give up in despair; or embrace the dissolution as a sign of union with a more encompassing reality. Depending on which tendency predominates, the result may be anxiety, depression, or a spiritual experience" (1998, p. 117). To investigate the mediating variables such as self-avowal of the experience, referred to as "embracing the dissolution" above, it is necessary to go beyond the prototypical model of awe.

## Beyond the Prototype

Over and above the prototype, all emotions are capable of further refinement. The notion of refined emotions is particularly pertinent to positive psychology that celebrates human excellence. Refined emotions, in contrast to their coarse or prototype versions, possess the following attributes: self-reflexivity, detachment, and second-order awareness.

*Self reflexivity* refers to self-referentiality of consciousness. It constitutes one of the foci of cognitive attention – inward toward the self instead of outward toward the world. *Second-order awareness* refers to a higher-level consciousness that renders first-level experiences reportable and articulate. *Detachment* refers to one pole of the mental attitudes and experiences continuum that varies from detachment to immersion. Instead of being immersed in experiencing and reacting to the eliciting event, one who is detached from the immediate experiences has the advantage of a mental distance, which renders possible reflections on the experience. When reflection takes a self-reflexive turn toward introspection, emotion becomes what is referred to by the German mystic Johannes Tauler (around 1300–61) as “an inward, contemplative desire” (Tauler, 1985, pp. 139–40). In sum, whereas prototypical cases of awe may be immersed, non-reflective, first order experiences, refined versions of awe are shaped by a self-reflexive and contemplative consciousness at a higher level of awareness.

For analysis of refined versions of awe, the prototypical model of awe is expanded to incorporate self-reflexivity along with its ramifications for levels of awareness and detachment. This expanded model of awe has the following advantages: Self-reflexivity provides a felicitous explanatory framework for the processes whereby failure of assimilation brings the self back to the drawing board for a radical revision of his or her model of the world (accommodation); self-reflexivity also calls for a shift of focus in scientific investigation from attributes of the eliciting condition to a person’s subjective self-reflexive processing of his or her own responses; lastly, the expanded model calls attention to the possibility that extensive, self-reflexive processing of one’s own responses may result in substantive accommodations that go beyond the transient need for accommodation. To demonstrate how perceived vastness and a need for accommodation play out with the addition of a self-reflexive, higher order, contemplative consciousness, the expanded model is applied to Otto’s phenomenology of awe, which has been a classic and an authoritative source on the phenomena.

## An Expanded Model of Awe

Awe lies at the core of Otto’s phenomenology of mysticism, the defining characteristic of which is *self-annihilation*, which expresses “the note of submergence into nothingness before an overpowering, absolute might of some kind” (Otto,

1970/1923, p. 10). Otto claims that the flip side of this “nothingness” of the self is the overwhelming Other – the *holy* which refers to that which is an exception to law, or outside the natural order of things, and therefore far exceeds all known mental schemes to comprehend it with. Consider for instance Abraham’s statement in Genesis: “Behold now, I have taken upon me to speak unto the Lord, which am but dust and ashes” (Gen. 18: 27). Otto’s analysis of this passage is consistent with the prototypical model of awe, which we recall, consists of the dual appraisal of perceived vastness at the object pole and need for accommodation at the subject pole of perception: “Thus, in contrast to ‘the overpowering’ of which we are conscious as an object over against the self, there is the feeling of one’s own submergence, of being but ‘dust and ashes’ and nothingness,” writes Otto (1970/1923, p. 20). But Otto does not stop here with the observation of “the emotion of a creature, submerged and overwhelmed by . . . that which is supreme above all creatures.” He goes on to say that Abraham is overwhelmed not only by the presence of the holy but also by his own “nothingness.” He writes: “It is the emotion of a creature, *submerged and overwhelmed by its own nothingness* in contrast to that which is supreme above all creatures” (p. 10, emphasis added). Note the self-reflexive turn in Abraham’s self-depreciation. Having been overwhelmed by the “wholly other,” Abraham is now overwhelmed by his own feelings of “nothingness.” A further illustration of the centrality of self-reflexivity in Otto’s phenomenology of awe is found in the story of Job.

To recapitulate, the expanded model of awe adds another dimension – that of consciousness – to the appraisal model of Keltner and Haidt. The expanded model claims that in addition to perceived vastness and need for accommodation, as postulated by the appraisal model, the phenomenology of awe entails a self-reflexive, higher-order, contemplative consciousness. This point is in keeping with Otto’s phenomenological account of Job. Since it is well known, the story of Job can be quickly adumbrated as follows: Job is a righteous man who suffered greatly. Having lost everything he had – property, children, and health – Job wanted to know why. Claiming his innocence, and rejecting the law of retribution professed by his pious friends, Job demanded an answer from God Himself. It was after rounds of futile debate between Job and his pious friends, “against the juridicalism of [their] accusation and justification, [that] the God of Job speaks ‘out of the whirlwind,’” writes Ricoeur (1974, p. 309). What did God say? Otto points out that God did not argue along the lines of: “My ways are higher than your ways; in my deeds and my actions I have ends that you understand not . . .” (1970/1923, p. 78). Otherwise put, the divine revelation was not cast in the propositional or conceptual framework. Instead, it was cast in imageries that, as Otto puts it, “express in masterly fashion the downright stupendousness, the well-nigh daemonic and wholly incomprehensible character of the eternal creative power; how, incalculable and ‘wholly other,’ it mocks at all conceiving but can yet stir the mind to its depths, fascinate and overbrim the heart” (p. 80).

A concrete example of the divine rebuttal may be helpful. Consider the following questions posed by God:

Who has cut channels for the downpour  
 And cleared a passage for the thunderstorm,  
 for rain to fall on land where no man lives  
 and on the deserted wilderness,  
 clothing lands waste and derelict with green  
 and making grass grow on thirsty ground? (*The New English Bible*, 1970, Job 38: 25–27)

In these rhetorical questions of God, Job is confronted with the vision of a world that concerns him not, a world that is totally irrelevant to his objectives and interests. It renders irrelevant the “main evaluative issues” of both “primary appraisal”—“Am I in trouble or being benefited, now or in the future, and in what way?” and “secondary appraisal”—“What if anything can be done about it?” (Lazarus & Folkman, 1984, p. 31). Similarly losing anchorage in relevance are all three “primary systems” of emotion (Oatley, 2004): the attachment system with its need for protection, the assertion system with its concern for power and dominance, and the affection system with its concern for affiliation. This scenario is the epitome of need for accommodation.

As predicted by the expanded model of awe, Job’s response to this perceived vastness is self-depreciation, “I knew of thee then only by report, but now I see thee with my own eyes. Therefore I melt away; I repent in dust and ashes” (*The New English Bible*, 1970, Job 42: 5–6). Job’s experience can be meaningfully compared with trauma, in which the self is also overwhelmed. The decisive difference seems to lie in the fact that Job’s “melting away” is willingly avowed. Thus Otto draws the distinction between “inward convincement” and “impotent” submission to superior power:

Job avows himself to be overpowered, truly and rightly overpowered, not merely silenced by superior strength. Then he confesses: “Therefore I abhor myself and *repent* in dust and ashes.” That is an admission of inward *convincement* and conviction, not of impotent collapse and submission to merely superior power. (1970/1923, p. 78)

Job seemed to have been overpowered twice: the first time by external circumstances, under which he lost everything in his possession; the second time by the overwhelming encounter with God, on which occasion he lost his recriminating, judging consciousness. In the framework of the expanded model of awe, we may say that Job experienced failed assimilation twice: the first time when he lost everything in his possession; the second time when he was confronted with a vision that was as grand as it was absurd to the very core. As Otto has noted, there is a world of difference between these two traumatic episodes. In contrast to his first trauma, Job’s second trauma was “avowed,” which signifies a decisively self-reflexive turn in consciousness, shifting attention from the emotion eliciting stimuli to his own responses. The upshot of all this is a new vision, which according to Otto entails a reconciliation: “this strange ‘moment’ of experience that here operates at once as a vindication of God to Job and a reconciliation of Job to God”



(1970/1923, p. 78); and healing: “For latent in the weird experience that Job underwent in the revelation of Elohim [Yahweh] is at once an inward relaxing of his soul’s anguish and an appeasement . . .” (p. 78).

The fulcrum through which vindication and reconciliation, anguish and hope converge is the self-reflexive consciousness. This point can be illustrated by Fingarette’s analysis of Job. He starts with the usual perceived vastness – self-annihilation theme: “We are allowed [in the *Book of Job*] a vision of existence as inexhaustibly rich in creative energies. We see life and death, harmonies and discords, joys and terrors, grace and monsters, the domestic and the wild. We are as nothing as measured against the whole; we are puny, vulnerable, and transient” (Fingarette, 1991, p. 215). Then as self-reflexivity enters the picture, our consciousness turns around, along with Job, to another plane of being, resulting in a dramatic transformation of ourselves from rags to riches, from awe to wonder: “As mere beings we can only be humble. But as beings who *are conscious* of this miracle, who participate however humbly in it, we are transcendently elevated and exhilarated. We are like unto the angels” (p. 215, emphasis added).

## A Contemporary Scene

Awe, like any other emotion, is capable of two types of presentations, prototypical and refined. While examples of the prototypical awe may be found in the submission to raw power, or the unreflective devotion of the masses to charismatic leaders, refined awe found an eloquent expression in the following statements of E. Mark Stern, a psychology professor and resident of New York City:

The sight of the ruin of the World Trade Towers is so very fresh. It is as fresh as a makeshift graveyard suddenly called into service. . . . Allow me to relate a tale from Elie Wiesel’s memoirs: “In my dream I am looking for my father, who is no longer looking for anyone. I see him leaning against the cemetery wall. He sees me and begins to cry, weakly, like the child he is becoming. He comes closer and rests his head on my lap. . . . A stranger goes before us and blows out the candles. Now it is dark. I no longer know where I am. ‘Father,’ I whisper, ‘where are you?’ He takes a deep breath and bends down as if to examine the plowed soil. I no longer see his face. Yet while I still know who he is, I no longer know who I am.” When I no longer know who I am, when the disappearance is so out of proportion. . . . When the darkness glares so absolutely . . . that absence of knowing is where the sacred begins. (cited in Sundararajan, 2002, pp. 185–6)

The experience of Stern meets all the criteria for refined awe as postulated by the expanded model: the perceived vastness (the sight of ground zero), need for accommodation due to failure of assimilation (the absence of knowing), and self-reflexivity (“I no longer know who I am”). This response to terrorism is tinged with so much pain, yet so refreshingly free from anger and vengeance. Although this type of response to calamities may not be representative of the general population today nor of any age, it shows the potential of refined types of awe to help

nations and individuals to transcend the mindset of the zero-sum games that have loomed large since 9/11.

## Future Directions in Research

Both theories of awe generate testable predictions. The prototypical model predicts autonomic responses as markers of awe and life-transforming consequences of awe. The expanded model of awe also predicts the transformative power of accommodation as a consequence of awe. But the two models make contradictory predictions on the following issues: on the frequency of experiencing awe, the prototypical model predicts less frequency for people in the upper echelons than those in the lower strata, whereas the expanded model makes the opposite prediction that those with more cognitive and affective resources are likely to experience refined versions of awe more often. Furthermore, the prototypical model predicts that the appraisal of threat or beauty should lead to more negative or positive experiences respectively. The expanded model predicts in contrast that the dichotomy of positive and negative experiences is transcended in refined emotions such that threat and beauty can co-exist in refined appraisals of awe. Both models are amenable to narrative recall studies and laboratory experiments. In addition, testing the expanded model needs to include fMRI analysis and other methodologies for consciousness studies. Lastly, individual difference measures, such as Emotional Creativity Inventory, may be used to test the differential frequency between standard and refined awe.

SEE ALSO: ► Admiration ► Haidt, Jonathan ► Positive emotion  
► Religiousness ► Spirituality

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# B

## Balance

Steven F. Bacon

*California State University*

Balance is achieved when a person develops harmony within the self, and between the self and others. The pursuit of a balanced life is an important aspect of several character strengths and virtues. For other strengths, a focus on achieving personal excellence is more important than balance. Focus-oriented strengths help people become better in areas where they already excel. The ultimate goal of practicing both kinds of strengths is the same: a satisfying and meaningful life. The path to a meaningful life will be different, however, for people pursuing balance versus focus.

The view of balance presented here has some common roots in ancient religion and philosophy. Buddhism, for example, recommends seeking balance in the middle way between hedonism and asceticism. The Greek golden mean recommends a similar path. Both of these are consistent with the modern strength of self-regulation, which is a balance-oriented strength. The balance versus focus distinction considered here is broader, however, than this single strength.

Wisdom is a prototypical balance strength. According to Sternberg, wisdom is a specific type of practical intelligence that is used to solve particular kinds of problems. Wisdom necessarily involves a direction (i.e., for the common good) and a process (i.e., balance). Wise solutions always involve balancing: a) the interests of the self with the interests of others; b) conflicting interests within the self (e.g., do I take the high-paying but boring job or the fulfilling job that doesn't pay well?); or c) the interests of the self within a larger social context (e.g., one's school, community, country, or God). Wise solutions also balance responses to best fit the environment (e.g., if I have an unreasonable boss, do I bend to her wishes, try to change her, or look for another job?).

In contrast, creativity is more representative of a focus-oriented character strength. Creative people put a great deal of time, energy and passion into developing their interests. When pursuing their interests, they are not concerned with balancing other interests. Creative people are autonomous, independent, and sometimes rebellious. They are not particularly interested in accommodating others. When exercising a focus strength like creativity, other interests – within the individual and outside – recede into the background. This is not to say that the creatively-focused people are antisocial – working in opposition to the interests of others – but simply that they are neutral with respect to the needs of others when pursuing their goals. A consequence of indifference toward others may be the strained interpersonal relationships sometimes found in the families of highly creative people. A possible consequence of inadequate attention to the self may be their higher risk for psychological disorder.

Table 1 summarizes some characteristics of balance and focus strengths. Creativity, leadership, curiosity, judgment, perseverance, social intelligence, love of learning, appreciation of beauty, and leadership are all considered focus strengths because their development involves focusing interest and energy on

**Table 1** Contrasting the Balance and Focus Strengths.

<i>Feature</i>	<i>Type of strength</i>	
	<i>Balance</i>	<i>Focus</i>
Associated strengths	Wisdom, fairness, citizenship, gratitude, spirituality, humility, kindness, love, self-regulation	Creativity, leadership, judgment, love of learning, persistence, curiosity, social intelligence, appreciation of beauty
Intrapersonal goal	Harmonize personal strengths and weaknesses; harmonize internal tensions	Increase personal competence
Interpersonal goal	Harmonize self and others' interests	None, but may choose to apply personal strengths to social ends
Predicted outcomes		
Intrapersonal	Integration	Achievement
Interpersonal	Good relationships	Variable relationships
Career track	Slower	Faster
Occupational achievement	Variable	Higher
Ultimate goal	Satisfying, meaningful life	Satisfying, meaningful life

becoming more competent but does not involve the balancing of any intrapersonal or interpersonal interests. Although some individuals may be able to balance other interests (e.g., family life) while focusing, development of the strength itself does not require this. Creative people, for example, often lead very focused, but unbalanced lives. Even leadership and social intelligence, which are inherently social, may not require the balancing of self and others' interests. Corrupt politicians and tyrants illustrate that that leadership can be wholly self-interested.

The balance strengths, in contrast, necessarily involve balancing competing interpersonal or intrapersonal interests and their development leads to improved competence in these activities. The strengths listed in Table 1 illustrate the range of different interests that can be balanced. Sternberg's wisdom – probably the broadest of the balance strengths – has already been described. Fairness balances self-interest with the interests of others or the competing interests of two other parties. Citizenship balances self-interest with the community's interest. Gratitude balances the joy of receiving a gift with the duty to repay the debt. Self-control balances competing intrapersonal interests, often long-term satisfactions with short-term physical pleasures. And humility balances the recognition of one's own value with the value of all other things in the world.

The intrapersonal goal of the focus strengths is to increase personal competence, or to become better at what one already does well. If people are creative, they will seek opportunities to further develop and express their creativity. All of their energy may be spent pursuing creative opportunities without regard for how this affects others parts of their lives. Underdeveloped parts of the self may be left that way, since spending time and energy in rehabilitation is effort away from pursuing excellence. In contrast, among the balance strengths that have an intrapersonal goal (not all do), the goal is to harmonize personal strengths and weaknesses or to harmonize internal tensions. For example, wise people will not consistently ignore a personal weakness and may challenge themselves to try new behaviors in appropriate settings. Such a wise but anxious person might take growth-enhancing risks around close supportive friends, but might avoid situations in which displaying anxiety would have high social costs.

Given the different goals and approaches of balancers and focusers we might expect different life outcomes. The single-minded pursuit of a creative idea, of an analytic strategy, or of a leadership goal will often lead to an identifiable achievement. When we think of exemplars of focus, we often associate them with some outstanding achievement, like Einstein's superior intellect and the theory of relativity, Mozart's creativity and his grand body of music, or Roosevelt's leadership and his New Deal reforms. The intrapersonal outcome of balance, however, is integration, which is not as easy for others to see. Because integration is less likely to produce a tangible object, we are less likely to notice products and deeds representing exemplary wisdom, gratitude, humility and self-control. Individuals exemplifying extraordinary balance are also less likely to come to mind.

The interpersonal goal for balance strengths that involve interpersonal interests – again, not all of them do – is harmonizing self-interest with others' interests.

Wisdom, for example, may involve balancing what is good for one's career with what is good for one's family. Citizenship may require a person to balance standing in solidarity with neighbors at a town hall meeting with enjoying a relaxing night at home. The likely outcome of striving for harmony with other people is good relationships with spouses, children, friends, colleagues, and communities.

Individuals pursuing focus-oriented strengths may choose to balance their interests with others, but this is not a necessary part of the pursuit. Curious people, for example, may pursue greater knowledge without considering the people around them, and they are not any less curious for doing so. Consequently, the interpersonal outcomes for focusers are likely to be more variable than for balancers.

The career tracks and occupational achievements of successful balancers and focusers are also likely to be different. The balance-oriented individual is likely to have a slower paced career, consistent with the sometimes maligned mommy- or daddy-track. Big career decisions, like whether to relocate or work longer hours for a better job – where better means more opportunities to develop personal strengths – will be less problematic for focusers. The smaller, day-to-day decisions should also favor focusers. Over a number of years, this pattern of decision-making in two equally-talented individuals will lead to faster advancement and greater occupational achievement in the focus-oriented individual.

Although Table 1 highlights how the balance and focus strengths differ from one another, it is important to remember their fundamental similarity: People pursue strengths and virtues because they think doing so will lead to better and more meaningful lives. The focus and balance strengths are simply alternative paths to this ultimate goal.

Like most human characteristics, balancing versus focusing is a matter of degree. Certainly some people will pursue several strengths simultaneously, and well-developed focus and balance strengths may be found in the same person. Whether people pursue one or several different strengths is perhaps less important than how the pursuit organizes their lives. When strengths are in conflict (e.g., leadership and love), it is not known whether balance or focus prevails.

The balance-focus distinction is a fairly recent development. In addition to the hypotheses already laid out, several fundamental issues await investigation. First, it is not known whether factor analysis or other data reduction methods will support the balance construct when applied to instruments that measure a variety of strengths, like the VIA Strengths Inventory. Second, rather than relying on current measures of strengths and virtues to indirectly assess focus and balance, new instruments should be developed that directly assess these constructs. Third, investigators should examine people's tendencies toward focus or balance to see if they are trait-like, that is, whether they are consistent across situations and time and whether they show predictable patterns across the lifespan. Erik Erikson's developmental model would predict, for example, that balance-oriented virtues might predominate later in life when there is an emphasis on integration. Finally, researchers might begin to look for additional correlates of balance and focus.

For example, one path to virtue might be more consistent with life satisfaction than the other, and there might be other variables that moderate the relationship between balance and happiness. Park, Peterson, and Seligman recently looked at the relationship between various character strengths and life satisfaction. Interestingly, six of the ten strengths most strongly associated with life satisfaction were balance-oriented (gratitude, love, wisdom, self-regulation, spirituality, and forgiveness), but only two were focus-oriented (curiosity and persistence; the other two strengths were neither balance-oriented nor focus-oriented).

SEE ALSO: ► Character strengths (VIA) ► Creativity ► Harmony  
► Self-regulation ► Wisdom

## **Bandura, Albert**

Michael D. Gomez

*University of Kansas*

Dr Albert Bandura (b. 12/4/1925) has been a key figure in the field of learning theory, personality, and his own social cognitive theory. He received his bachelor's degree from the University of British Columbia in 1949, his PhD degree in 1952 from the University of Iowa, and is currently the David Starr Jordan Professor of Social Sciences in Psychology at Stanford University.

Prior to Bandura's early research, the intellectual climate held the belief that learning occurred primarily through direct reinforcement (e.g., Skinnerian operant conditioning). In his now famous Bobo doll experiment, Bandura demonstrated that individuals can be reinforced for behaviors vicariously through modeling, specifically as it related to aggression. This research led to the formulation of his social cognitive theory. This new theoretical perspective was distinguished from social learning theory (and its foundational paradigm of behaviorism) by acknowledging the reciprocal relationship between human beings and their environment (physical, social, and cultural) more than traditional behaviorism had up to that point allowed, thus creating new vistas which could be explored in the field of psychology.

Two areas within social cognitive theory that have direct bearing on the field of positive psychology are the concept of self-efficacy and Bandura's agentic theory of human development. Self-efficacy is a person's belief about his/her ability to perform actions. These beliefs are thought to be influenced by: mastery experiences, seeing people similar to oneself master a task, persuasion that one can successfully master a task (i.e., motivation), and affective states (e.g., stress or depression). Bandura believes that the higher the level of self-efficacy the more well-adjusted a person will be. Furthermore, people with high levels of self-efficacy will be more equipped to deal with the adversities life presents and will be more successful in the face of such difficulties. As Bandura said, "In social cognitive



theory, belief in one's efficacy to produce effects by one's actions is the foundation of human aspiration, motivation, performance accomplishments, and well-being" (personal communication, March 31, 2007).

His agentic theory of human development can be seen as more than just a new direction of research, but instead can be viewed as a synthesis of the vast areas explored by him up to this point. Inherent in this view is a rejection of the duality between humans and their environment. It stresses a more reciprocal relationship whereby human agency creates social systems and then is influenced by those systems. Human agency consists of four core properties: intentionality (individual or collective strategies and plans for realizing goals), forethought (future directed plans), self-reactiveness (self-regulation from the individual that explains the link between thought and action), and self-reflectiveness (the meta-cognitive ability to reflect on one's actions and adjust current and/or future plans accordingly). As Bandura stated, "The cultivation of agentic capabilities adds concrete substance to abstract metaphysical discourses about freedom and determinism" (Bandura, 2006, p.165).

SEE ALSO: ► Agency ► Person-environment fit ► Self-efficacy  
► Social cognitive theory

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## Benefit Finding

Suzanne C. Lechner

*University of Miami*

*Benefit finding* refers to an individual's perception that major positive changes have occurred as a result of challenging life events such as major illness or trauma. After a trauma, illness or other negative experience, some individuals report a new appreciation of their own strength and resilience. Other people may feel that their relationships are stronger and that they feel emotionally closer to others, especially family and friends. Yet others report that they have become more compassionate or altruistic. Life philosophies may also change. Some people cite an enhanced appreciation of "the little things in life" and redirected priorities. Finally, some individuals note a new openness to spiritual experience or religious activities. Succinctly, benefit finding is akin to the adage "When life hands you lemons, make lemonade."

Interest in the ways in which individuals may grow or change following stressful life experiences paralleled the formation of the positive psychology movement.

By focusing on well-being instead of pathology, the study of benefit finding and growth has articulated people's positive adaptation to stressful, traumatic, and negative life events. Until recently, studies of stressful, challenging and traumatic life events (such as cancer, rape, traumatic accidents or HIV) focused primarily on the negative aspects of the trauma/illness, while paying little attention to features of the experience that might be perceived as positive. As the discipline of psychology began to incorporate positive psychology's focus on human health and thriving, researchers, clinicians and theorists began to focus on characterizing the consequences of challenging life experiences, including both their positive and negative aspects. It may seem counterintuitive that stressful, challenging or traumatic life events could be perceived as beneficial. The fact that positive life changes are reported at all is interesting, in light of the obvious physical and emotional impact of these experiences.

Descriptions of benefit finding following adverse life events have been described by many authors. However, research has been plagued by some critical challenges. First, there has been little consensus regarding terminology. Posttraumatic growth, stress-related growth, found meaning, experienced meaning, meaning as outcome, cognitive adaptation, perceived benefits, self-transcendence, positive sequelae, and thriving are among the many terms applied to this concept. Many researchers use these terms synonymously and interchangeably but there may be critical differences in the implicit meanings of these different terms. Another challenge has been in the area of measurement. Researchers disagree about the optimal way to measure benefit-finding, with some authors calling for the use of qualitative interview techniques and other authors preferring to use quantitative techniques such as written scales. Another challenge lies in the term *benefit finding* itself. Many say that the term's active-sounding name implies that the process of finding benefits is ongoing, but most researchers use the term to refer to any benefits that a person may have already found (using the active verb to refer to the past tense). These and other challenges have hampered systematic investigation of this phenomenon.

There are now reports of benefits resulting from various illnesses such as breast cancer (early stage and advanced; newly diagnosed, long-term survivors), prostate cancer, mixed cancers, ovarian cancer, liver cancer, colorectal cancer; hematological malignancies; young adults with leukemia or lymphoma; myocardial infarction and heart disease; HIV and AIDS; multiple sclerosis; severe acute respiratory syndrome (SARS); schizophrenia; chemical dependency; lower limb amputation; childhood cancer; acquired brain injury; fibromyalgia; rheumatoid arthritis; psoriasis; and lupus. Adults, college students, adolescents and children have reported benefits after negative life experiences. Individuals who were bereaved, victims of terror incidents, combat veterans, child survivors of the holocaust, survivors of childhood sexual abuse, victims of sexual violence, victims of physical violence, victims of trauma, victims of natural disasters, victims of traumatic exposure to war, former refugees and displaced people, political prisoners, parents of ill children, parents who have lost a child to illness or violent death, caregivers of ill persons, therapists after disaster work or psychotherapy, daughters of breast

cancer survivors, astronauts following spaceflight, and even people who have experienced romantic relationship breakups have been reported to identify ways in which they feel they have grown or changed as a result of their experience.

## **How Can We Measure Benefit Finding?**

Most studies of benefit finding use quantitative validated scales or qualitative methods (such as interviews or open-ended written questions) to measure benefit finding, each with unique limitations. The quantitative scales are easy to score, straightforward and easy to administer, but none of them ask about all the life domains that change following adverse events. There are also concerns that these scales may create bias because they ask only about positive changes that occur. Qualitative methods are more comprehensive and are also straightforward for participants to answer; however, they are more difficult to score and can create bias depending upon the way that the target question is worded. Both types of measurement, quantitative and qualitative, are subject to bias related to retrospective recall. That is, people are asked to remember their attributes prior to the trauma, and compare them to how they are now. Research has shown that people are often inaccurate when they are asked to calculate change in this manner.

## **Do People Really Find Benefits?**

Are reports of benefit finding based in fact or fiction? Discussions about the validity of benefit finding have been hotly debated. Some suggest that benefit finding represents a critical epiphenomenon for understanding well-being following trauma, highlighting the positive changes that can occur after illnesses and traumas. Others question whether benefit finding is simply a reflection of one's personality, a coping strategy or a way to bolster self-esteem and raise the possibility that benefit finding is a misconstrual of events or even self-delusion.

There is also some evidence that people tend to report that they have grown and changed over time even in the absence of a threatening event. Reports of benefit finding could be the result of the passage of time and motivation to perceive that one is constantly growing and changing throughout life. There are strong opinions on both sides of this debate.

## **Future Directions in Research, Theory, and Methodology**

In summary, heightened interest in psychological health, human strengths and thriving has augmented psychology's understanding of the ways that people adapt to circumstances in life. This growing area of inquiry has generated a great

deal of research. As mentioned previously, there are challenges to overcome in future research. For example, this field of inquiry would greatly benefit from improvements in methodological precision. Given the limitations of existing measures of benefit finding, several groups are exploring new ways of identifying and quantifying benefit finding. New measures of benefit finding would significantly improve researchers' ability to study this phenomenon to gain an accurate picture of the consequences of stressful life events.

Additionally, there have been few truly prospective studies that measured benefit finding from a time prior to a stressful event and followed patients during the months of recovery. Prospective studies are critical for addressing many of the unanswered questions surrounding benefit finding as discussed here. Unfortunately, prospective studies are difficult to conduct because illnesses, accidents and traumas are unpredictable. Some studies have measured benefit finding in undergraduate students; however, most of these participants did not experience severely traumatic and life-altering events during the study periods. Future scholarship should be directed toward longitudinal and prospective designs because evidence gleaned from such studies may settle some of the issues in the debate over the validity of benefit finding as well as elucidate the way in which benefit finding develops over time.

SEE ALSO: ► Posttraumatic growth ► Resilience ► Suffering

## Biofeedback

Rollin McCraty and Robert A. Rees

*Institute of HeartMath*

Modern biofeedback generally involves recording and displaying physiological signals which provide indicators of automatic physiological functions that normally occur outside our conscious awareness. Listening to, learning from and controlling physical processes normally considered automatic are practices that in either primitive or sophisticated form are found in many, especially spiritual, traditions, including Eastern yogic practices. In its broadest sense, biofeedback is something practiced by nearly everyone. Looking at oneself in a mirror, taking one's temperature, stepping on a scale, or having an awareness of some undetected illness may all be forms of biofeedback. The idea of providing such feedback to help people improve their ability to self-regulate psychological or bodily functions had its origins in the late nineteenth and early twentieth centuries. However, it did not emerge as a field of serious scientific investigation and therapeutic practice until the 1970s and 1980s. At present, biofeedback as a mode of complementary and alternative medicine is widely used in both medical and psychotherapeutic practice.

In medicine, biofeedback techniques are used for such things as digestive system disorders, headaches, high and low blood pressure, epilepsy, cardiac arrhythmias,

incontinency, and certain movement disorders. In psychotherapy it is used to deal with various psychiatric conditions (e.g., panic, anxiety, obsessive-compulsive disorders, and various phobias), to reduce stress, and to induce relaxation. These techniques work by helping patients become conscious of and control patterns of physiological functioning.

Types of biofeedback instrumentation include skin conductance levels (SCL), peripheral skin temperature, electromyogram (EMG), electroencephalography (EEG), heart rate (HR), and, more recently, heart-rate variability (HRV). Such procedures and the development of new instrumentation may provide even more subtle and sophisticated means of detecting, modulating and controlling physiological functions, thereby improving the quality of life.

The type of biofeedback that is currently being used in the widest variety of applications is HRV and HRV coherence feedback. As a noninvasive measure of neurocardiac function that reflects heart-brain interactions and autonomic nervous system (ANS) dynamics, HRV monitoring is an effective biofeedback modality because it provides a reliable measure of autonomic nervous system dynamics that is particularly sensitive to changes in psychophysiological states. HRV can be derived either from the ECG (using electrodes placed on the chest) or from pulse wave recordings (using a plethysmographic optical sensor placed at the fingertip or earlobe).

Changes in the autonomic nervous system are particularly sensitive to emotional states, and positive and negative emotions can be readily distinguished by changes in heart rhythm patterns. For example, during negative emotions such as anger, frustration, and anxiety, heart rhythm patterns become more erratic or disordered, indicating less synchronization in the reciprocal action that ensues between the parasympathetic and sympathetic branches of the ANS. In contrast, positive emotions, such as appreciation, love, and compassion, are associated with a highly ordered sine wave heart rhythm pattern, reflecting greater ANS synchronization.

Heart rhythm pattern analysis, which examines the varying shape of the HRV waveform, is a promising tool in psychophysiological research and biofeedback application. It is particularly valuable in applications that aim to illuminate the physiological correlates of different mental and emotional states; assess the extensive interactions among the mental, emotional, and physiological systems in arousal-induced pathology; and examine psychophysiological responses to different interventions.

Research has shown that sustained positive emotions lead to a highly efficient and regenerative functional mode associated with increased coherence or resonance in heart rhythm patterns and greater synchronization and harmony among physiological systems. A new development in biofeedback technology is the recent introduction of heart rhythm feedback trainers which monitor heart rhythm patterns and help people develop skills to maintain states of increased physiological coherence. The use of pulse wave sensors makes this technology extremely versatile, time-efficient, and easy to use in a wide variety of settings.

Heart rhythm feedback trainers, like the emWave® and emWave PC developed by the Institute of HeartMath, are currently utilized in medical, mental health, corporate, academic and other settings to improve clinical, psychological, and performance outcomes. This technology holds promise as an effective, practical tool for the enhancement of health and human potential.

Heart rhythm feedback training is a powerful tool to help people learn to self-generate states of increased physiological coherence at will, thereby reducing stress and improving health, emotional well-being, and performance. Heart rhythm feedback training also helps individuals develop emotional self-regulation skills that increase their capacity to sustain coherent states and their associated benefits.

Many health professionals have found heart rhythm monitoring and feedback to be an effective tool to support and facilitate a wide variety of therapies, both conventional and complementary. For example, this technology is increasingly being used by neurofeedback practitioners to calm clients and stabilize the nervous system before sessions that use EEG feedback protocols. This preparation often allows for a shorter and more effective session.

Many clinicians have found heart rhythm feedback to be an effective addition to treatment programs for chronic conditions that are associated with or exacerbated by emotional stress, including fibromyalgia, chronic fatigue, hypertension, asthma, environmental sensitivity, sleep disorders, diabetes, and cardiac arrhythmias, among many others. Practitioners also use heart rhythm feedback devices to monitor the real-time psychophysiological effects of various therapeutic interventions that affect autonomic nervous system dynamics.

In the future, it is likely that heart rhythm feedback training will be increasingly incorporated into programs for the prevention and treatment of cardiovascular diseases and arousal-induced pathologies. Its use is also likely to increase in education, as more schools incorporate programs that seek to educate students in emotional awareness and emotion regulation skills. Future developments in research, heart rhythm monitoring technologies, and pattern analysis methods will enable an even more refined electrophysiological discrimination of emotions than is currently possible. This may help therapists guide clients in developing greater awareness and understanding of their emotional responses, both conscious and subconscious, and ultimately achieving greater control over their emotional well-being and health.

One of the primary benefits of biofeedback is that it is self-empowering. As individuals learn to become more sensitive to their hearts, minds, and bodies; as they become more attuned to their physiological and emotional rhythms, signals and patterns; and as they learn new self-regulating skills for stimulating, modulating and controlling various functions that affect physical and emotional health, they will experience increasing mastery of their lives. In a way, biofeedback is a way of helping the human system function as it was designed to function.

SEE ALSO: ► Complementary and alternative medicine ► Heart-brain connection ► Neurofeedback

## Broaden-and-Build Theory of Positive Emotions

Michael A. Cohn<sup>a</sup> and Barbara L. Fredrickson<sup>b</sup>

<sup>a</sup>University of Michigan; <sup>b</sup>University of North Carolina at Chapel Hill

The *broaden-and-build theory of positive emotions* describes the short-term effects of positive emotions on attention, cognition, motivation, and physiological responses, and describes how these transient effects produce long-term changes in individuals' personal resources. For example, imagine a person whose day involves a passing moment of joy or amusement. Subsequently, he or she will be more optimistic and expansive, perhaps being unusually friendly towards an acquaintance or friend, or taking an interest in a usually ignored topic. If done frequently, he or she may develop a new friendship or an area of expertise, which will be both enjoyable and practically valuable in the future.

The broaden-and-build theory describes scenarios like these based on three empirically-supported premises:

1. Positive emotions *broaden* the range of thoughts and actions to which people are inclined.
2. This broadened repertoire of thoughts and actions helps *build* enduring resources.
3. Positive emotions evolved to help build resources rather than focusing exclusively on immediate concerns.

The first and second premises describe a causal link: Positive emotions precede and give rise to growth in resources. The third premise offers a framework to help explain why positive emotions lead to broadening and why broadening helps people build resources.

The broaden-and-build theory was developed by Barbara Fredrickson and her research team at the University of Michigan, combining Fredrickson's own research with existing findings in fields such as perception, resilience, problem-solving, and emotional appraisal. Fredrickson's early work on the broaden-and-build theory was awarded the Templeton Positive Psychology prize in 2000. The most recent review of the theory, including a broad range of empirical support, is the chapter by Cohn and Fredrickson in the *Handbook of Positive Psychology* (2nd ed.).

### Broadened Thought-Action Tendencies

Modern theories view emotions as multi-component response tendencies. An emotion is not just a subjective experience; it also affects muscle tension, hormone release, blood flow and breathing, and facial expression, and produces changes in attention, cognition, and motivation. These effects unfold over a relatively short

time span following a conscious or unconscious assessment of the meaning of an event. The effects coordinate to incline people toward a certain type of action or inaction, referred to as the emotion's *thought-action tendency*.

Theories of thought-action tendencies have typically focused on describing the negative emotions: Fear leads to attention to threats and escape opportunities, physiological preparation to flee or freeze, and facial expressions signaling one's state. Anger creates preparation to attack, disgust to expel, and so on. The negative emotions tend to *narrow* an individual's range of thoughts and actions. Negative emotions are evolved responses to evolutionarily relevant types of threat, and they override normal behavior and funnel people toward types of action that helped keep people alive and able-bodied in the past.

Positive emotions, in contrast, do not typically appear under threat. Rather, they indicate that a biological need has been fulfilled, that one is approaching a goal, or that some aspect of the environment is pleasant or agreeable. In these situations, there is no single action that is critical to survival. Instead of narrowing people down to one type of response, positive emotions cause them to broaden their perspectives. People who experience positive emotions may come up with novel, creative, or challenging thoughts and actions. They may look beyond the present moment to provide for the future or may look beyond themselves and think of what they can give to others.

A variety of studies have examined broadened attention by inducing participants to feel positive, negative, or neutral emotions. When people were asked what they would like to be doing if they weren't in the lab, the ones who had experienced positive emotions such as joy or serenity produced lists with the most activities and those activities were more varied. When they were asked to solve problems, they outperformed the other participants on tasks that required insight or creativity, and also on challenging intellectual tasks that required receptivity to changing information. When given categorization problems, they formed broader and more inclusive categories, attending to both prototypical and more unusual properties of items. These all point to an increased breadth of attention, incorporating novel activities and perspectives. Research that has found negative effects of positive emotions typically finds reduced attention to details and a tendency towards using heuristics and stereotypes. These too can be seen as a "big-picture" approach to problem-solving and indicate that positive emotions can have both positive and negative effects depending on the problem under consideration.

Positive emotions also induce a broadened sense of self. Participants randomly assigned to receive positive emotional experiences were more aware of things they could do for their friends than were other participants. On a larger social scale, positive emotions made participants less racially biased in their face perception, and simultaneously *worse* at perceiving physical markers of racial boundaries.

Finally, positive emotions are able to broaden basic perceptual functions. For example, when shown a group of *F*s in a *T* shape, people who experienced positive emotions became more likely to automatically see the figure as a *T* (the broad, overall shape), and responded more slowly when asked whether there were



Fs (the small, detailed shape) present. Thus, even at a basic perceptual level, positive emotions lead to a “big-picture” perspective.

Research on the thought-action tendencies associated with specific positive emotions has been consistent with the general broaden effect. Joy, for example, does not lead to any kind of specific response, but it energizes the individual and leads to exploratory play. Interest broadens people’s focus beyond the immediate moment, and allows them to put their energy into learning about a complex subject, be it an academic text or the nuances of a landscape. Love leads people to explore, savor, or play with a loved one. None of these activities fulfills an immediate biological need or remedies an immediate threat. This provides a challenge from the perspective of evolutionary psychology: to explain why humans evolved readiness to experience broadened thought-action repertoires and why broadened repertoires came to be paired with pleasurable, reinforcing feelings.

## **Evolutionary Value of the Broaden Effect**

The broaden effect is valuable not because broadened thought-action repertoires serve present needs for reproduction or survival, but because they enrich the future. Imagine ancestral humans: If they are hungry, threatened, or fleeing a predator, their negative emotions will aid them in finding a prompt and life-saving solution. But what should they do once these immediate needs are taken care of? They now have the opportunity to work on things that will bear fruit later. Exploring the nooks and crannies of the nearby forest has no value now, but it may prove essential later when tracking prey or fleeing an attacker. Engaging in friendly interactions with a same-sex friend contributes nothing to one’s present evolutionary success, but it may provide valuable social support or protection during a future crisis. There is substantial evidence that farsighted civility and commitment are important in modern society, in traditional low-technology societies, and in nonhuman primates, but in order to access the benefits of long-term cooperation, people need to overcome the impulse to take advantage of others for immediate gain. The broadened perspective created by positive emotions may be key to the ability to take this long view.

## **The Build Effect**

Positive emotions are transient and easily disrupted by negative events. However, broadened thought-action repertoires lead people to learn things, make friendships, or develop psychological resources that prove valuable over time. These resources outlast the positive emotions that helped generate them and are available even in neutral or threatening situations.

Correlational research on both humans and nonhumans suggests that positive emotions play a crucial role in development. Securely attached children – those

who experience the most consistent caregiver love – are more persistent, flexible, and resourceful problem-solvers than their peers. They also engage in more independent exploration of novel places, and by consequence, develop superior cognitive maps of those spaces. The intellectual resources associated with secure attachment also appear to last into adulthood. Securely attached adults are more curious and open to information than their insecurely attached peers. Experiments with children ranging from pre-school to high school reinforce the claim that positive emotions build intellectual resources by showing that induced positive states – in comparison to neutral and negative states – produce faster learning and improved intellectual performance. Finally, correlational studies with both humans and nonhuman mammals suggest that social play builds enduring social relationships. Positive emotions, experienced over the course of a month, predict whether a new acquaintance becomes a friend. Mutually supportive social relationships, in turn, predict longevity, and in times of need they can directly influence survival.

Positive emotions also help with recovery from chronic stressors. Prolonged negative situations like bereavement or joblessness evoke negative emotions, but cannot be solved by the kind of immediate, narrowly-defined action that negative emotions encourage. Consistent with this view, studies have shown that people who experienced some level of positive emotions during bereavement (alongside their negative emotions) showed greater psychological well-being a year or more later, and that this occurs partly because positive emotions were associated with the ability to take a longer view and develop plans and goals for the future. Similarly, in a longitudinal assessment of college students' emotions and mental health before and after the September 11 terrorist attacks, pre-crisis trait resilience predicted psychological growth and reduced risk of depression, but that this difference was fully mediated by experiences of positive emotion in the wake of the attacks. Resilient people fared better, and this is because they were more likely than their nonresilient peers to have experienced positive emotions. Importantly, resilient people were not devoid of negative emotions – they felt fear and grief much like their less resilient peers – but finding occasional opportunities to feel positive emotions seemed to have alleviated some of the negative effects of a prolonged narrowed mindset.

Regular experiences of positive emotion are known to contribute to valued life outcomes. In 2005, Lyubomirsky, King, & Diener published a review of over 200 studies in which people who were happier went on to have more satisfying relationships, greater success at work, better coping skills, and even improved physical health and longevity. Experimental research corroborates these benefits: When working adults were randomly assigned to receive a daily positive emotion induction for eight weeks (a guided meditation focused on generating feelings of love and compassion) or to a wait-list control group, daily positive emotions predicted gains in several important personal resources. Relative to control participants, meditators were physically healthier, had better close relationships, and reported greater self-efficacy and psychological well-being. Participants who reported these gains also reported their overall lives as being more satisfying.

## Significance of the Broaden-and-Build Theory

The broaden-and-build theory is significant for theoretical emotions research. It provides a more thorough account of the spectrum of positive emotions than did past theories, which frequently shoehorned in the positive emotions after developing the theory to describe negative emotions. The theory provides an important complement to research the benefits of positive emotions by offering a *mechanism* by which positive emotions can help people develop resources, rather than just statistically associating positive emotions with good outcomes.

Understanding the broaden-and-build effects of positive emotions is especially useful to positive psychologists, who frequently seek to move beyond the lab and examine personal growth and excellence in people's lives. There is evidence that positive emotions underlie some beneficial abilities, such as resilience and resistance to implicit racism. High levels of positive relative to negative emotions are also implicated in successful long-term relationships, both in romance and in business. Thus, research on growth and positive functioning may benefit from seeking out positive emotions as an antecedent to other desirable constructs.

Researchers designing interventions may want to deliberately harness the effects of positive emotions. Csikszentmihalyi has suggested that making challenging activities enjoyable is one of the most important ways to create a sense of engagement and commitment to the intervention program. Modeling of the second-by-second dynamics of successful business teams suggests that frequent positive emotions (at a high level relative to negative emotions) are critical to remaining flexible and open to new courses of action, while a lack of positive emotions leads to rigidity and rejection of new options. Positive emotions increase problem-solving skills and attentiveness to new information. These all suggest that positive emotions can help people break out of behavioral or psychological ruts, and take advantage of the ideas that positive psychology has to offer. Interventions may also be challenging because they require participants to recognize their present weaknesses and areas for improvement. Research suggests that induced positive emotions can make people less defensive and more accepting of critical feedback.

## Limitations and Future Directions

The broaden-and-build theory is currently the most comprehensive framework for understanding and predicting the effects of positive emotions, both in terms of immediate mechanisms and long-term outcomes. Much work remains to be done to make the theory more robust and specific – notably, researchers have not yet enumerated all the domains in which positive emotions can broaden one's outlook, and the nature of the broaden effect is underspecified for any given domain. For example, it is difficult to predict whether a broadened outlook will lead to a more flexible, comprehensive approach to a given problem, or to a general, heuristic

approach that misses important details. The theory has also focused on generalized effects common to all positive emotions, although other research programs have made progress in understanding the thought-action tendencies of specific positive emotions. Research on specific emotions will be important as we seek to understand the specific types of novel thoughts and actions different positive emotions may evoke and the types of resources to which they may contribute.

The basic tenets of the broaden-and-build theory are extensively supported and can be expected to lead to worthwhile research for some time to come. Even so, the specifics of the theory and its domains of applicability are likely change over time as new findings arise.

SEE ALSO: ► Fredrickson, Barbara ► Future mindedness ► Physical health ► Positive emotions ► Resilience ► Well-being

## Buddhism

Marvin Levine

*Stony Brook University*

Buddhism, with some 500,000,000 adherents, is considered one of the world's great religions. However, it is not a religion in the Western sense. There is not a central notion of a God to be worshiped. It is, rather, a philosophy concerned with the human circumstance and its implications. Since its inception Buddhism has had as its focus a single central issue: How shall one live so as to attain to the richest, most valuable possible life? In more modern terms: How does one achieve an authentic, enduring happiness? This issue brings with it a corresponding question: What methods are available for the attainment of such a goal?

The Buddhist movement arose from the teachings of one man, who began life some 2,500 years ago as prince Siddhartha Gautama, son of the ruler of a small kingdom in northern India. In his youth he showed splendid accomplishments as a warrior and in the administrative arts. It was expected that he would become a great king. In his late twenties, however, he became concerned with what he felt were the difficulties of ordinary life, including not only the extremes of sickness, pain, grief, and death but the commonplace troubles of disappointments, angers, fears, boredom, and the like. He used the Hindu term *Dukkha* (suffering) to refer to this large set of afflictions. How can one find lasting happiness in this world of *Dukkha*? The palace life, with its constant distractions of many pleasures, began to seem superficial to him. He thus left the palace to embark upon a spiritual search. He found teachers and fellow seekers like himself who helped him deepen his understanding of human nature and who taught him methods for controlling his feelings and emotions.

Siddhartha saw that the chief obstacle to attaining a lasting, profound happiness was the vulnerability of people to the many troubles the world can inflict, troubles that are completely beyond their control. There are obvious events like wars and

floods. But he saw that even with more subtle events one's inner life is at the mercy of the external world. For example, a fellow may start out one morning in a happy mood, but some person cheats him and he is grouchy and depressed for the rest of the day. Ordinary happiness is also at the mercy of biology. A little decay appears in a tooth and one is soon experiencing great pain. After six years of study and disciplined practice, Siddhartha saw the way out of this world of Dukkha, the way that leads to *Nirvana* (liberation), to this deepest joy, to this "peace that passes all understanding." His serenity and wisdom became so manifest that people started referring to him as *the Buddha*, a term of honor meaning "the awakened one," or "the enlightened one."

While he, personally, had now found the way to this ultimate happiness, he also understood that millions of people are floundering in this world, pushed this way and that by the forces of Dukkha. He decided, therefore, to teach anyone who would listen, to help others make progress on the path leading to the happiness he had attained.

The core of his teachings is summarized with four postulates, which in the Buddhist world have become known as the Four Noble Truths.

## The Truth of Dukkha

Humans are vulnerable to a multitude of more or less painful experiences such as hunger, fear, loneliness, pain, hatred, anger, worry, disgust, embarrassment, and so on.

Dukkha has two aspects worthy of note. The first is the fact of change. This is a world of flux; everything from one's biology to the external world is always changing. This is why, in ordinary living, it is hard to find lasting happiness. There is nothing in ordinary life that permits one to "live happily ever after." The second is the determinism inherent in ordinary life, what in Hinduism and Buddhism is referred to as *Karma*. Humans typically do not control their inner life. The environment and biology dictate their feelings and emotions. In Buddhist writings an individual who lacks insight into his or her own nature, into that of others, and into the human condition, is referred to as *unenlightened*. The unenlightened individual is compared to a leaf on the ground, blown this way and that by the wind. To the degree that one is unenlightened, one's inner life and behavior is determined by Karmic forces.

## The Truth of the Cravings

Humans are vulnerable to Dukkha because of the way human nature is constituted. Specifically, humans are a bundle of urges, agitations, passions, needs – in a word, cravings. We have urges to obtain food, drink, sexuality, companionship; to escape pain, boredom, irritation, and so forth. These cravings have three main sources: biological cravings; ego, social, and stimulation needs; and culture-induced cravings.

## Biological Cravings

Species survival has been accomplished through motivational mechanisms: desire for a mate, hunger, thirst, anger, and fear. Survival is the only function of this motivational system. The fact that this system frequently afflicts humans with such feelings as frustration (e.g., when we lack food or a mate) and panic (e.g., when we've been threatened by a predator) appears to be a matter of indifference. This survival-oriented system of cravings, then, carries with it the vulnerability to suffering.

## Other Needs

This system of basic biological cravings also includes a number of more subtle urges. These, too, make humans vulnerable to suffering.

### *Ego needs*

Humans seek reassurance about their worth and ability. As a result criticism, insults, and put-downs are sources of pain. Talk of death and dying produces discomfort. Rotting and mutilated forms induce feelings of disgust and revulsion.

### *Social needs*

Humans are gregarious. The need for companionship, friends and loved ones can, when not satisfied, produce loneliness, sadness, and grief.

### *Stimulation needs*

In the absence of stimulation, humans are vulnerable to boredom.

## Culture-Induced Cravings

In addition to these biologically-based urges, the culture instills in its members other types of desires, other sources of Dukkha. It provides models to which they must conform. The individuals are to eat certain foods, dress in certain ways, live a certain kind of family life. Deviation from any of these can produce embarrassment, guilt, or shame. The culturally conditioned prejudices, stereotypes, and attitudes produce all sorts of other desires.

In short, the obstacles to one's happiness are within oneself, in one's needs and agitations, prejudices, the blindly-accepted attitudes, all of which can produce cravings and pain.

## The Truth of Liberation

Since it is clear that the many cravings are the obstacles to a profound and enduring happiness, it is clear what must be done: The cravings must be diminished;

the attainment of happiness requires that one liberate oneself from these intense needs and agitations. A common saying is, “Conquer the beasts within.” Transform yourself so that this pervasive motivational system – this system derived from biology, from conditioned attitudes and beliefs – serves you rather than rules you.

## **The Practices for Attaining Liberation**

The change from being unenlightened to approaching full liberation is described as a path. One makes progress on this path by behaving according to eight guidelines, grouped into three categories: Wisdom, Ethics, and Inner Practice.

### **Wisdom**

1. Right Understanding: One should strive to know oneself, to understand others, and to have insight into the human circumstance.
2. Right Thoughts: One should always be mindful of one’s thoughts and should gradually learn to turn from negative thoughts, e.g., angry, envious, or fearful thoughts to constructive thoughts.

### **Ethics**

3. Right Speech: One’s speech should never produce animosity but should aim at bringing about harmony.
4. Right Actions: One should avoid adding to the suffering in the world, but should always act to ease the suffering.
5. Right Livelihood: One should try, wherever possible, to engage in professions that help others and to avoid those that can be hurtful to others. One should be considerate as an employer and dependable as an employee.

### **Inner Practice**

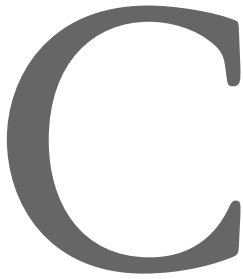
6. Right Energy: One should pursue liberation with diligence.
7. Right Mindfulness: One should always be aware of one’s inner experiences. For example, know when anger arises; be aware of what makes it arise, what makes it diminish.
8. Right Meditation: One should engage in contemplations that facilitate understanding, and that provide the direct experience of calmness and serenity.

This, then, is the core of Buddhist teachings. Buddhism’s contribution to the literature on happiness is to point out that ordinary happiness, the happiness that comes from pleasure, purposeful living, or skillful expression, is always vulnerable to loss.

The fundamental, enduring happiness – the happiness that is ultimately at the foundation of ordinary happiness – requires self-transformation, the process that leads to enlightenment and liberation.

SEE ALSO: ► Happiness ► Religiousness ► Spiritual well-being





## Calling

Amy Wrzesniewski,<sup>a</sup> Kathryn Dekas,<sup>b</sup> and Brent Rosso<sup>b</sup>

<sup>a</sup>*Yale University*; <sup>b</sup>*University of Michigan*

A *calling* is traditionally defined as a meaningful beckoning toward activities that are morally, socially, and personally significant. Originally defined quite broadly as a calling in life, the term calling is now most often applied to an individual's work occupation.

The notion of a calling is deeply rooted in Christian tradition and theology. In this tradition, individuals are "called" by God to unique vocations that are to be carried out in service of God and community. Perhaps the best known treatment of callings in the Christian tradition arose with the writings of Protestant theologians John Calvin and Martin Luther. Luther and Calvin's discussions of calling place value on dutifully serving God through whatever work or "station" one occupies in life. In this perspective, a calling is revealed to an individual from God, whether directly or through the individual's particular talents or circumstances. As such, the pursuit of a calling is a religious rather than a self-focused endeavor. In the early twentieth century, German sociologist Max Weber claimed that Calvin's interpretation of callings planted the seed of modern capitalism by generating a "Protestant work ethic" that drove a movement of individual pursuit for success. Despite modern critiques of Weber's interpretation of Calvin, his perspective on the development of Western society greatly influenced scholarship on the topic of callings.

## Callings in the Modern Era

The concept of calling has continued to transform over time, largely losing its religious cast in the modern era. Most definitions of calling are now focused in general on the individual experience of work as deeply meaningful and engaging, intrinsically motivating, and having a positive impact on the wider world. Thus, the concept of calling has taken on stronger individualistic tones, resembling the teachings of Greek philosophers, such as Aristotle, who argued that an individual could achieve authentic fulfillment through the pursuit of personally meaningful and intrinsically motivating activities. These perspectives raise several interesting tensions with respect to the religious roots of the term. For one, the assumptions that underlie the source, purpose, and expression of a calling differ between the traditional religious sense and the modern individualistic notion of a calling. Much of the contemporary research surrounding the concept of calling builds on these underlying tensions.

The increasingly individualistic and work-related meanings of a calling may be due to the changing nature of work. Increasing emphasis is placed on the importance of work as a source of fulfillment, meaning, and purpose in life today, as individuals spend more time at work and change jobs more often and readily than in the past. Accordingly, a calling is typically understood in modern vernacular to be connected to the domain of work, rather than to other life domains such as leisure or family. While one may find deep fulfillment and connection to the wider world through many activities, those activities unrelated to work are perhaps better classified as passions. With the growing significance of work and its increasingly unpredictable nature, a focus on work as a calling offers a powerful way for individuals to make meaning of their work.

Recent research on callings in the fields of psychology and organizational behavior has emphasized multiple facets of the concept. Some scholars define a calling as deeply fulfilling work that an individual believes makes the world a better place. Others suggest that callings have a strong prosocial component combined with a strong sense of clarity of purpose. Still others contend that callings are an ultimate form of career success which transcends a particular job. Despite these differences, most modern conceptions of a calling share an assumption that the work itself is what determines the deep level of meaning taken from it. These approaches differentiate having a calling from having a *job*, where the primary focus of working is to make an income, and from having a *career*, where the primary focus is occupational advancement. In contrast to those with jobs or careers, those with a calling engage in work as an end in itself, rather than as a means to extrinsically motivated outcomes, such as economic success or career achievements. These views differ slightly from earlier treatments of calling, where meaning is simply found in the act of pursuing whatever type of work God has called one to do. In both traditional and modern understandings of calling, however, there is an explicit assumption that callings can be enacted in any type of work, and are not exclusively reserved for work defined by others as worthy.

## Major Dimensions of Callings

The meaning of a calling differs a great deal depending on whether one is taking a religious or a secular perspective. While callings have taken on a decidedly secular, individualistic cast over time, this transformation is a departure from the concept's origin as a responsibility from and to God, with several accompanying differences in underlying assumptions about the source of the calling. In the religious treatment, a calling is an invitation from God or another spiritual force, awaiting to be discovered and pursued by the individual. This stands in contrast to a secular sense of calling as something to be chosen or created in the work one does.

Secular views of calling also differ from spiritual views in their treatment of how the calling is enacted: either through who one is, or through what one does. According to spiritual and religious perspectives, a calling is an invitation that the person may choose to accept or not. Pursuing the calling is cast primarily as a moral responsibility or duty to serving a higher power or greater good. In secular treatments of calling, however, the pursuit of the calling is more oriented around self-exploration and fulfillment. The individual follows a freely chosen path, and the responsibility is therefore to the self rather than to a higher power or external force. Features of calling that are shared by both traditions include a sense that the work is positively impacting the world and is intrinsically motivating as an end in and of itself. Individuals pursuing their calling often feel a great sense of urgency for following the path to which they feel intended.

Perhaps the two most salient dimensions of a calling in modern research revolve around the calling as a source of intrinsic enjoyment and as a means to serving a greater good. Most modern treatments of calling capture both of these elements of the experience of work as a calling. However, great promise lies in further understanding the connections between the experience of a calling that is pursued for individual enjoyment and fulfillment and a calling that is done in service of others. In a sense, each dimension harkens back to the distinctions made between religious and secular perspectives of a calling. Recent research has started to differentiate between the impact of each model of calling in individuals' lives, showing that different views of calling make a difference for how individuals approach and experience their work.

## The Impact of Callings

A growing volume of research has investigated the impact of having a sense of calling toward one's specific job or occupation. This research shows that feeling one's work is a calling affects both individuals and their organizations. Individuals with a stronger sense of calling toward their work tend to have higher work and life satisfaction, find work more meaningful, put forth greater effort at work, feel their work makes the world a better place, and feel more motivated to remain in

their specific jobs, even if they were no longer paid. Feeling that one's work is a calling has also been linked to stronger identification and engagement with work. While most research to date has investigated attitudinal and self-reported behaviors, recent studies are beginning to measure behavioral outcomes such as reemployment, performance, and occupational exits. As well, recent studies are beginning to consider the potential drawbacks associated with seeing work as a calling. This is a promising direction for generating knowledge about the difference a calling orientation makes.

## **Future Research Directions**

The study of callings remains a young field of inquiry, and further research is needed for a better understanding of the prevalence, importance, origins, and outcomes of callings. Specific areas for future inquiry abound. For example, researchers may investigate the similarities and differences between callings that are rooted in individual fulfillment with those rooted in service of a common good. Scholars have also typically operationalized callings as a job- or occupation-level construct, but it is plausible that a calling may be enacted more broadly toward the domain of work in general. Differentiating between the experience of a particular job as a calling and the activity of work in general as a calling is likely to provide deeper insights into the structure of the meaning of work. In addition, innovation is needed in the measurement of callings. Most research in this area has assessed callings through survey items. However, recent research has begun to explore the nuances of callings through qualitative interview methods. Future research would benefit from mixed method study designs that further elaborate the ways scholars can assess the presence and power of callings in individuals' lives. Finally, it would be valuable to examine the relational elements of callings in order to understand more fully how significant others or the community impact on the experience of a calling. Given the expansive impact that callings may have on individuals, organizations, and society, the study of callings offers rich opportunities for scholarship in a variety of disciplines.

SEE ALSO: ► Career development ► Job satisfaction ► Organizational psychology ► Vocation

## **Capitalization**

Shelly L. Gable

*University of California, Santa Barbara*

*Capitalization* refers to the process of telling another person about something positive that has happened. The way that the other person reacts is referred to

as the *capitalization response*, of which there are four types: active-constructive, passive-constructive, active-destructive, and passive-destructive.

We all know that bad things happen from time to time. Psychologists have often focused on understanding how people maintain or restore their happiness in the face of both major and minor stressful events. In other words, researchers have often asked people, “What do you do when things go wrong?” The answers to these questions are remarkably diverse. For example, people sometimes try to reframe a negative event to put it into a different perspective, and other times they have a hard time letting go of a negative event and ruminate about what happened. Regardless of how people cope with negative events internally, one thing for sure is that people also regularly seek out their spouses, partners, friends, family, and community for support during stressful times. More importantly, *social support* – feeling as if others will be there for you in times of stress and receiving support when you need it – is beneficial, both psychologically and physically.

Fortunately, good things also happen; and for the vast majority of people, good things happen more often than bad things. Ironically though, psychologists have been less likely to ask people “What do you do when things go right?” What psychologists do know is that when good things happen, people actively tell other people about these positive events – a process referred to as capitalization.

For example, in studies of daily life, people were asked to describe “the best thing that had happened to you during the day” (they completed the form just before going to bed). Participants in these studies reported events ranging from relatively minor triumphs, such as finding money in the pocket of a pair of pants when doing laundry and finishing a small project, to major events such as being accepted into medical school and getting a raise at work. About eight times out of ten, they told at least one other person about these events. And while people are more likely to capitalize about bigger events, they are also quite likely to capitalize about smaller events. Who *do* people turn to when things go right? People tell those closest to them: 97 percent of the time positive events are shared with friends, roommates, parents, siblings, and spouses/romantic partners. Only a small fraction of the time do people share their positive events with acquaintances or strangers.

Why do we share the news of our good fortune with others? For one, when people tell others about these positive events they experience more positive emotions and feel greater life satisfaction than when they cannot or choose not to tell others about these positive events. Keep in mind that these benefits are *in addition* to the positive emotions and life satisfaction that are experienced with the event itself. In other words, capitalizing on a positive event increases the impact of that event. However, these benefits rest, in large part, on the reactions of the person or people with whom the events are shared.

When a person capitalizes on his or her positive event, there are several different ways in which the target of that capitalization attempt can react. We have found that these responses range on two major dimensions: How active versus passive is the response? And, how constructive versus destructive is the response?

In terms of the first dimension, the responder can show interest and involvement when the event is shared, or the responder can be reserved and subdued in his or her reply. In terms of the second dimension, the responder can be positive and supportive or he or she can be negative and unsupportive. When these two dimensions are combined, there are four prototypes of responses to capitalization attempts: active–constructive, passive–constructive, active–destructive, and passive–destructive, which are defined below.

*Active–constructive:* These responses convey enthusiasm regarding the event and positive regard towards the person. They often entail questions about the event, discussions about the important aspects of the event and the implications of the event. The active–constructive responder is often enthusiastic, excited, or happy.

*Passive–constructive:* These responses may also seem positive or supportive, but they are more reserved and subtle. They are often quiet exchanges that involve few if any questions about the event and little or no elaboration on the implications of the positive event.

*Active–destructive:* These responses are those in which the responder is also keenly involved in the exchange. However, this response entails a minimization of the importance of the positive event or a focus on the potential downsides of the event, or both.

*Passive–destructive:* These responses are those in which the responder shows little or no interest in the positive event. The responder may change the subject completely or talk instead about themselves.

For example, Samantha comes home from her job in an advertising agency and excitedly tells her partner, Jack, that her boss called her into a meeting today and assigned her to be the team leader for a multi-million dollar product advertising campaign for one their biggest clients. An active-constructive response from Jack might be “Wow, this is great news! Your skills and hard work are definitely paying off; I am certain that the promotion you want is just around the corner. What is the product?” A passive-constructive response could be a warm smile followed by a simple “That’s nice, dear.” An active-destructive response might be “Wow, I bet the project will be complicated and difficult, are you sure you can handle it? It sounds like it might be a lot of work; maybe no one else wanted to lead the project. You will probably have to work even longer hours this month.” And, a passive-destructive response might be “You won’t believe what happened to *me* today,” or “What do you want to do for dinner?”

Our research has clearly shown that only one type of response is good for the person who is capitalizing on the positive event: an active–constructive response. That is, the more that others respond in an active–constructive way when news of a positive event is shared, then the more that the person who shared experiences the benefits of capitalizing (i.e., more positive emotions and greater life satisfaction). When others respond either passively or destructively, people do not reap the benefits of capitalizing and often experience stress and other negative emotions.

Perhaps though even more important is the role that responses to capitalization attempts play in the quality of the relationship between the capitalizer and

the responder. Our research team has asked people to describe how their spouses or dating partners typically respond to them when they share the occurrence of positive events. We found that people who had partners that responded to them in active–constructive ways (e.g., “My partner usually reacts to my good fortune enthusiastically,” “I sometimes get the sense that my partner is even more happy and excited than I am”) were significantly more satisfied with their partners, felt more intimacy with their partners, had more trust of their partners, were more committed to their partners, and had fewer conflicts with their partners. We also found that those who had partners who typically responded in an active–destructive manner (“My partner often finds a problem with the event,” “He/she points out the potential downsides of the event”), or a passive–destructive manner (“My partner often seems disinterested,” “My partner doesn’t pay much attention when I share the event”), or even a passive–constructive manner (“My partner says little, but I know he/she is happy for me,” “My partner is usually silently supportive of the good things that occur to me”), were less satisfied with their partners, less intimate with their partners, less trustful of their partners, less committed to their partners, and had more conflicts with their partners. It is worth noting that it was surprising to us that even passive–constructive responding patterns were associated with poorer quality relationships. Finally, this pattern of results is not limited to romantic relationships, but we have found similar results when we examined parent-child pairs, roommates, and friends. For all of these types of relationships, reporting that the other person typically responds in an active–constructive manner was associated with higher quality relationships.

However, it could be that just as beauty may be in the eye of the beholder, so might the quality of responses to capitalization be in the eye of the capitalizer. It could be that some people may not be satisfied with any response they receive and characterize it as destructive, while others might read someone’s slightest smile as unbridled enthusiasm. That is, would an objective outside observer watching a capitalization exchange between two people agree on what type of response was being given? We addressed this question by asking couples to come into the laboratory and talk about a recent positive event with their partners while we videotaped their discussions. After each exchange, we asked the person sharing the event to rate the response of their partner. We also had coders who knew nothing about the couples or their responses watch the videotapes and rate the responders as to how active versus passive and how constructive versus destructive they were. We found that these objective observers’ ratings correlated with how the capitalizer felt after the discussion. Specifically, when outside observers rated the response as active and constructive, the person who had shared the event also felt more satisfied with their partner and closer to their partner. Thus, it seems that the actual response matters and it is not just that some people see any response as active (or passive), and constructive (or destructive).

The research on capitalization has produced two important findings. First, people do something not only when bad things happen, but also when good things happen. They tell people, and the more they do this, the better off they are. Second,

how others respond when good news is shared has important implications for both the personal well-being of the individual sharing that news and also for the relationship that the individual has with the person with whom they shared the event.

SEE ALSO: ► Close relationships ► Family functioning ► Intimacy  
► Marital happiness ► Social support

## Career Development

Lisa Y. Flores and Lizette Ojeda

*University of Missouri*

Although it may seem obvious, career development is about work. Specifically, career development refers to how individuals manage and implement decisions related to their job/career across their lifetime. Career development is a process in which individuals evaluate aspects of the self that can help to make career-related decisions that will lead to increased job opportunities, enhance job satisfaction, and improve job performance. A significant amount of people's time and energy is devoted to working. As work is a central component of daily life and because it overlaps with so many other parts of life, psychologists believe that having a fundamental understanding of work and its role in an individual's life is essential to helping people. It is important to consider that career development is much broader than just our work and jobs; it encompasses a broad range of life roles (e.g., student, worker, partner, parent) that interact with one another in various settings (e.g., school, work, home) and events to develop one's life work over time. Equally important to note is that work includes both paid and unpaid pursuits, and that people hold varied definitions of work and the role it plays in their lives. For some individuals, work serves to define their identity and for others, work is something to do to meet the basic needs of life. Positive psychology is related to career development in that career development deals with an individual's navigation of, experience in, and satisfaction with work. Career development addresses a variety of positive psychological emotional and cognitive components. Some of these relevant constructs include happiness, life and work satisfaction, resilience, flow, meaning of life, self-efficacy, optimism, and hope.

Professionals in the field of career development include both practitioners and researchers who are interested in the role of psychological, social/environmental, cultural, political, educational, and economic factors in influencing the career development of individuals in our society. Psychologists who conduct career development research include counseling psychologists and industrial-organizational psychologists. These professionals seek to understand individual behaviors associated with career planning, career decision-making, and work performance. For example, vocational researchers are interested in understanding career choice



selections, career transitions, career adjustment, and job satisfaction. On the other hand, psychologists who are practitioners help individuals or groups of individuals to implement career decisions and to enhance their overall well-being and performance at work and life in general. When working with individuals who have work-related concerns, practitioners often utilize both vocational psychology theory and research to inform their practice.

The study of career development has a long and rich history, originating in the early 1900s with the work of Frank Parsons, who is often referred to as the “father of vocational psychology.” Parsons founded the Vocation Bureau in Boston to provide systemic vocational guidance to youth in the area. His book, *Choosing a Vocation*, was published a year after his death in 1909 and outlines key components in the vocational guidance and counseling process. His three-part framework for career counseling included a clear understanding of the self, knowledge of different lines of work, and true reasoning. This work served as the foundation for early career counseling practice and contemporary trait-factor theory of career development. Parsons’ advocacy for social reform continues to influence vocational psychology research and practice today in efforts to provide equal educational and occupational opportunities to individuals from all segments of society.

Several theories have been developed over the years to explain career choice selection, adjustment, and satisfaction. These theories have served as frameworks for generating research and informing career counseling practice. Career development theories are generally grouped into trait-factor, developmental, social learning/social cognitive, decision-making, constructionist, sociological, and personality frameworks according to the major assumptions underlying the respective theories. Trait-factor theories are based on the assumption that individual traits can be measured and matched with information about the world of work to make career decisions. Individual traits that are important to assess include abilities, values, interests, and personality. Some of the major trait-factor theories include John Holland’s theory of vocational personalities and work environments and Rene Dawis and John Lofquist’s Minnesota theory of work adjustment. Bandura’s social learning/social cognitive theory was extended to the study of career development in Lent, Brown, and Hackett’s social cognitive career theory and Krumboltz’s career theory of social learning. The common assumption underlying these theories is the belief that career decision-making is influenced by an interaction of personal, environmental, and behavioral factors. Core social cognitive and social learning constructs that are believed to influence career goals include career-related self-efficacy and outcome expectations and role modeling. Developmental theories include Super’s lifespan/life space theory of development and Ginzberg’s stages of career development. These theories approach career development as a life-long process in which individuals pass through various developmental stages with different vocational-related tasks. Key career constructs that originated in developmental approaches to career development include role salience and career maturity.

From the beginnings of Parsons' work, the field has blossomed into a vibrant and active profession that seeks to advance knowledge and practice in career development. An important professional organization is the National Vocational Guidance Association, which was formed in 1913 and later, in 1985, changed to the National Career Development Association. Other professional career development associations that are devoted to contributing to the scientific knowledge, practice, and public awareness of vocational development include the Society for Industrial and Organizational Psychology of the American Psychological Association and the Society of Vocational Psychology, a section of the Society of Counseling Psychology of the American Psychological Association.

Other indicators of the importance of work and careers in our lives include the variety of self-help books that are available to assist individuals in making career decisions. One of the most popular books by Richard Bolles, *What Color is Your Parachute?*, has served as a valuable resource for individuals interested in a self-guided exploration of their career development.

Contemporary career development research and practice is heavily influenced by social constructionist, multicultural, and international perspectives. These approaches have been incorporated within the field to understand and explain how a range of backgrounds and experiences contribute to the unique issues and career paths of diverse groups of people. Social constructionist approaches to career development advocate for a more subjective, personal understanding of the career development process in which individuals are encouraged to make meaning of their personal career/life stories. Thus, unlike the other theories which seek to understand a universal process to career development, social constructionist approaches assume that multiple realities to career development exist. As educational and work settings across the country continue to become more culturally and internationally diverse, the career development field has, in recent decades, been characterized by its increasing focus on multicultural and international issues. Career development professionals in the United States have issued challenges to other professionals in the field to avoid becoming culturally encapsulated. These calls to the profession highlight that career theory, research, and practice in the United States have developed based on middle-class Eurocentric values and serve to warn the profession from over-generalizing knowledge to individuals from under-researched groups. Today, career researchers and practitioners are examining how career development theories can be modified and applied to individuals from diverse backgrounds and are using this knowledge to understand the ways in which an individual's gender, sexual orientation, social class, and race and ethnicity may interact to uniquely influence one's career development journey.

The role of careers in people's lives has received attention for well over a century. Career development theory, research, and practice will continue to evolve based on societal events and needs, economic changes, and increasing cultural diversity and global awareness. In addition, technological advancements will promote the establishment of new jobs as well as make redundant old jobs that no longer

require human efforts. To conclude, career development is a broad concept that encompasses different phases of the career development journey, traveled by diverse individuals with unique cultural backgrounds who have varied conceptions of work, goals in life, and perceptions of career success.

SEE ALSO: ► Calling ► Counseling psychology ► Occupational health psychology ► Positive organizational scholarship ► Self-efficacy

## Change (Stages of)

James O. Prochaska<sup>a</sup> and Janice M. Prochaska<sup>b</sup>

<sup>a</sup>*University of Rhode Island*; <sup>b</sup>*Pro-Change Behavior Systems, Inc.*

Change is a process that unfolds over time and involves progress through a series of stages: Precontemplation, Contemplation, Preparation, Action, Maintenance and Termination. These stages will be briefly reviewed and then examined for how they can be applied to help many more people enhance their health and well-being.

Precontemplation is the stage in which people are not intending to change in the foreseeable future, usually measured as the next six months. Historically, this important segment of the population was written off as being noncompliant, unmotivated, resistant to change or not ready for counseling or coaching. It is now recognized that it was professionals who were not ready for them, not motivated to match their help to clients' needs and resistant to changing their own mental models that equated change with taking action. People in the Precontemplation stage underestimate the positives of changing, overestimate the negatives and typically are not aware of making such mistakes. If they are not aware, it will be difficult for them to progress without some help.

People in Contemplation are intending to take action in the next six months. They are more aware of the positives of changing. But, often the negatives increase as well. Individuals who are intending to lose weight, for example, may focus on having to give up some of their favorite foods, having to experience some deprivation and having to risk failure again. This stage is marked by a delicate balance between the pros and cons of changing that can produce profound doubt or ambivalence. Their general role is when in doubt, don't act. Without outside help these people can also remain stuck in this stage.

People in Preparation are intending to take action in the next month. Historically they were seen as motivated and ready for action-oriented programs that dominated health promotion. For example, Clinical Guidelines for the Treatment of Smoking were based on 6,000 studies. There were many evidence-based therapies for motivated or prepared smokers. There were no evidence-based therapies for "unmotivated" smokers in Precontemplation or Contemplation even though they constitute more than 80% of all smokers in the US. Traditional mental models excluded the vast majority of populations with the most deadly of behaviors.

The number one concern of those in Preparation is, “When I act, will I fail?” This is a realistic concern, since across almost all chronic behaviors, the rule of an action attempt is relapse rather than sustained action. These individuals can be helped by being prepared for how long the Action stage lasts. They usually believe the worst will be over in a few weeks or a few months. But, if they ease up on their efforts too soon, they will regress rather than progress, since the action stage lasts about six months.

After about six months, people progress into Maintenance where they don’t have to work as hard to keep progressing. They need to be prepared for the most common cause of relapse, namely, times of stress and distress. Times of depression, anxiety, anger, boredom, and loneliness are the times when most people are at their emotional and psychological weakest. A majority of Americans cope with tough times by drinking more alcohol, smoking more cigarettes, eating more junk food, or taking more over-the-counter or under-the-counter drugs. A positive form of oral behavior for coping with distress is talking. Another is exercise and a third is some form of relaxation, such as yoga, meditation, prayer or deep muscle relaxation. People prepared to cope with times of distress with such positive approaches are much more likely to keep progressing. Maintenance is assumed to last about five years.

Termination is the stage in which people have total self-efficacy or confidence that they will not go back to unhealthy behaviors like drinking or smoking to deal with distress, and they have no temptation to return. Historically, mental models said that people with such addictions are always in recovery and never recovered. We prefer a more optimistic model from such self-defeating and self-destructive patterns. Fortunately, we have found that about 20% of alcoholics and 20% of smokers abstinent for less than five years have already reached the criteria for termination.

Steps for helping people progress include assessing what stage they are starting in. Another step is to help set realistic starting goals like progressing to the next stage rather than being pressured to move immediately to action.

The first principle for progressing from Precontemplation to Contemplation is that the person’s appreciation of the pros or positives of changing must increase. A sample technique would be to ask couch potatoes in Precontemplation to list all the positives that could come from regular exercise. They typically list four or five. The challenge is to see if they can double their list. As their list starts to include more positives, like enhanced self-esteem, better moods, less stress, better sex life and better sleep, they are progressing and changing.

Across 55 behaviors from 140 studies, the pros of changing always increased from Precontemplation to Contemplation. These behaviors ranged from chronic addictions to anorexia, depression to obesity, smoking to stress. The point is that a limited number of principles of progress can hold for a large number of behaviors.

The second principle is that the negatives, or cons of changing must decrease for people to progress from Contemplation to Action. As positive psychology would predict, the positives (pros) of changing and the negatives (cons) are not correlated.

So, just reducing the cons does not increase the pros. Each needs to be improved independently.

In Contemplation, the pros and cons are about equal, reflecting the profound ambivalence of this stage. "Is it worth it?" "Is it not?" "Should I keep progressing or should I put it off?" The average American makes the same New Year's Resolution about three years in a row before they finally take significant action.

What is particularly remarkable is that from Precontemplation to Action the pros increase exactly 1.00 standard deviations (*SD*), while the cons decrease from Contemplation to Action about .5 *SD*. One *SD* is like increasing our IQs about 15 points, which could have major impact on our lives. Helping people increase their behavior change IQs can also have profound impacts on their lives. Since the positives have to increase twice as much as the negatives have to decrease, our programs place twice as much time and emphasis on increasing the pros.

When people are prepared to take action, they can apply their long list of positives. With physical activity, for example, they can place on a "To-Do List," "This week I am walking for my heart – next week for my brain, then my immune system, my children or grandchildren, my vitality, and my partner." Pretty soon they are running. Since there are more than 60 scientific benefits of regular exercise, people can go more than a year with a different benefit each week. In the process, they are affirming so much of their body, self and society.

There are other principles for progressing from Precontemplation, such as consciousness raising (e.g., education, information and feedback); dramatic relief (e.g., inspiration and catharsis); and environmental reevaluation (e.g., how changing will enhance the well-being of others). Progressing from Contemplation also entails self-reevaluation which is how I think and feel about myself now (e.g., as a pessimistic person) and how I will think and feel about myself after changing (e.g., a more optimistic person).

Progressing from Preparation includes self-liberation which is my belief in my ability to change and my commitment to act on that belief. Once in Action, reinforcement or rewarding progress is important, particularly self-reinforcement, since others will soon take changes for granted. Helpful relationships or social support from others is particularly important in tempting or distressing times. Counter-conditioning or substituting positive alternatives for negative ones continues from Action on as does stimulus control or transforming one's environment to promote more positive behaviors.

By applying different principles and processes of change at different stages of change, programs can be designed to help entire populations progress and not just the small minority who are motivated or prepared. One of the messages is, "Wherever you are at, we can work with that." By proactively reaching out to entire populations with such messages and such stage-matched interventions we can reach the vast majority of people who can benefit from programs designed to enhance health and well-being.

Examples of such programs include smoking cessation, where a large majority of smokers are reached, but the large majority is not motivated to quit. These

programs give participants individualized feedback on which principles and processes they are applying appropriately compared to their peers who progress the most, which they are underutilizing and which they are relying on too much. With just three 20-minute interactions over six months, about 25% of the participants are not smoking at long-term follow-up. This is about the same efficacy rates as traditional action-oriented programs that reached only about 1 percent of smokers who are motivated. But the impact of our programs is much greater because they reach 70 and 80 percent of a population. Furthermore women are as successful as men, adolescents as adults, African Americans as Caucasians, and depressed smokers as nondepressed. We have also demonstrated that with such help populations can be effective in changing three or four behaviors and still achieve about 25 percent abstinence from smoking. With populations who are not managing stress effectively, similar programs help 60 percent to take effective action during treatment and maintain that progression for the next 12 months. This is particularly important given the role that stress and distress play in relapse across behaviors. A demonstration of this program is provided at [www.prochange.com/stressdemo](http://www.prochange.com/stressdemo).

The list of effective population based interventions continue to grow and include tackling the following behaviors: diet; sun exposure; medication adherence; partner abuse; and depression.

A recent innovation is to develop more creative methods for changing multiple-behaviors rather than just working on each behavior separately. Integrated approaches are particularly promising where a higher order constant is targeted to change a broader range of related roles and behaviors. An example is with bullying prevention – bullying is the number one daily health and mental health worry of children and youth in the US. With a population approach the aim was to not only help bullies change but also victims and passive bystanders. Passive bystanders were encouraged to be part of the solution even if they didn't see themselves as part of the problem. A broad range of bullying behaviors were targeted including hitting, shoving, threatening, mean gossiping, ostracizing, and stealing or damaging belongings.

The higher order construct or theme was relating with respect. Again with just three brief interventions, all three roles of bully, victim or passive bystander were reduced by 30 to 40 percent in separate clinical trials in elementary, middle and high schools. These three programs are included in SAMHSA's National Registry of Effective Programs and Practices (NREPP) and the Office of Juvenile Justice and Delinquency Model Programs Guide.

Positive psychology is particularly well positioned to apply stage of change and principles and processes of change to positive constructs, like respect, and to help populations progress on a broad range of roles and related behaviors. Such progress can help many more individuals and populations to enhance health and well-being.

SEE ALSO: ► Coping ► Intentional self-development

# Character Education

Grant J. Rich

*University of Alaska Southeast*

Definitions of character education past and present vary widely, from the very narrow to the quite broad, though many promote that such education advocates the development of strengths, virtues, life and citizenship skills and the ability to utilize such skills in real settings. The word *character* comes from a Greek word meaning “to mark,” as one would with an engraving, but the question of whether character is inborn and innate on the one hand or shaped by environment and experience on the other is a matter of considerable debate in character education as are the issues of how much, and when across the life span character may change.

Some definitions of character education may be quite narrow. For instance, some scholars define character education specifically as a direct education approach that teaches students certain basic moral principles with the goal of preventing them from participating in immoral acts. Such a definition assumes that certain behaviors are wrong, such as lying, stealing and cheating, and that character education must transmit these values to all students. This definition of character education distinguishes it from related concepts such as values clarification and cognitive moral education. In many definitions of values clarification, this approach to moral education is said to emphasize helping students to explore and then clarify their own values and life goals. In such an approach students are not told what values to embrace, but are instead encouraged to define their own values and to learn about the value systems of others. This approach leaves defining right and wrong to the students and it is often referred to as a values-free and relativistic approach when compared to direct-instruction character education. Cognitive moral education approaches tend to rely heavily on cognitive developmental work such as that of Lawrence Kohlberg and his intellectual heirs. A premise of such approaches is that as moral reasoning develops, along with increased cognitive ability, understanding of such principles as cooperation, trust, justice, and democracy will also emerge in students. Such approaches encourage the teacher to be a facilitating guide on the side rather than a sage on the stage who merely transmits lessons and maxims. Often such approaches involve discussion of moral dilemmas and moral issues, in which students actively listen and participate rather than passively receive information.

## History

Developing good character has long been a goal of education. Countless schools, as well as youth organizations and athletics teams, mention such goals in their mission statements. Religious leaders and politicians often note such goals as well

when discussing the purpose of education or when revealing plans for improving education.

In the first part of the twentieth century, character education was also popular, and teachers, parents, and civic leaders voiced concerns over what they viewed as the imminent decline of youth morals and values. The demise of this character education movement appears in part to be the result of large-scale evaluation research by Hugh Hartshorne, Mark May, and colleagues in the late 1920s. These scholars found that in real-world settings, values did not necessarily predict actual moral behavior. They found that the real-world settings and situations had more of an impact on behavior than any character education received in school. Later, in the 1970s, moral education programs that focused on values clarification and the development of moral reasoning (such as work influenced by Lawrence Kohlberg) became more popular. The potentially relativistic nature of the values clarification and moral reasoning approaches caused controversy for some parents, teachers, political leaders, school districts, and communities. The legacy of such controversies were the character education programs established in the 1980s and 1990s that promoted a character education that agreed on teaching certain values believed to be essential or universal. William Bennett's work became popularly cited by educators, policy makers, and psychologists.

Persistent controversies in character education concern the vision of what being a good and moral person entails and, if and when values are taught, what values these should be. As the United States becomes increasingly multicultural and as technology and affordable transportation increasingly make a global village a reality, issues concerning cultural relativism and character education promise to become increasingly important and salient to the field. Of course, the debate over the content of character education programs is not entirely new. For instance, as early as the 1960s, the eminent theorist Urie Bronfenbrenner wrote on Soviet methods of character education, noting differences between Soviet socialization processes and ones in practice in the USA, such as differences in criticism of self and others. Bronfenbrenner's ecological view hinted at the developmental systems approaches of modernity. His acknowledgements that families, schools, communities, and societies help form character and that different societies and cultures may choose to teach different sets of values through different means resonate with contemporary work. More recently, Christopher and colleagues (2003) have written specifically on the issue of culture and character education, noting that "if the virtues are *not universal*, then character education will necessarily amount to a privileging of particular moral visions or particular cultural ideals concerning what is a good or mature person" (p. 85). For instance, Christopher examines a popular character education program and argues that this program emphasizes caring for others with scant attention to care for the self and care for the environment. The author then proceeds to note that many well-known ethical traditions – both Western and non-Western (such as the self-cultivation of Confucius and the virtue of selfishness of Ayn Rand) – include care for the self as an important value. Care for the environment, Christopher points out, is an important part of



Native American spirituality, Taoism, and deep ecology. Christopher also directs attention to the concept that the notion of the self may vary greatly across cultures, particularly between individualist and collectivist cultures and between many Asian and non-Asian cultures. Other examples may include cross-cultural differences in values relating to care and the respect for the sick and elderly. Critics may argue that the focus of direct-instruction character education approaches should be on those values which are universally shared. Of course, some may argue that not all of these values are as universally shared as initially believed. The debate between what is culturally universal and what is relative has existed for many years in psychology and even longer in other fields, such as philosophy. It appears that such a debate will continue to challenge positive psychologists in their search to illuminate the good life and in developing good character.

While some may argue that the definition of character education loses meaning when it is broadened to include more than only direct-instruction programs, others argue that evidence from investigations of service learning programs, positive youth development, structured extracurricular youth activities, and explorations of concepts related to strengths and virtues such as developmental assets, resiliency, thriving, and flourishing has much relevance to understanding how good character develops and how it is achieved. Positive psychologists have been involved in the exploration of many of these concepts. It appears that despite the controversy, interest in character education remains high. For instance, while there are a number of professional journals in psychology, education, and related fields that welcome submissions related to character education, within the past five years or so a *Journal of Research in Character Education* has been launched that is entirely devoted to the topic, and the recent initiation of the *Journal of Positive Psychology* ensures another outlet for work from relevant fields.

## Current Emphasis

Several recent approaches to character education emphasize the process by which the self identifies with moral commitments and the idea that character education is best understood through an exploration of how the psychology of character develops. In addition, service learning and service learning style programs are becoming increasingly common.

Study of moral exemplars indicate that while such models may exhibit some stable aspects of personality, they are also shaped by personal and contextual factors such as families and neighborhoods, some of which are under the control of the person and some of which are beyond the control of the person. For instance, the concept of “moral luck” indicates the notion that chance events, such as becoming disabled or winning the lottery, may impact development in significant ways. Aside from luck, however, scholars note the potential to create environments that facilitate the development of moral identities. The mechanism of social influence, voluntary organizations, school attachment, and service learning may all help in

fostering the development of a sense of self in youth that is closely allied with a sense of moral identity.

Some scholars note that the literature in cognitive psychology on expertise is relevant to character education. As with scholarly investigations of chess experts and child music and language prodigies, it may be possible that highly practiced regions of experience may lead to the development of chronically accessible schemas of reasoning and behavior. A moral person thus may have developed scripts, schemas, prototypes, and problem-solving and decision-making frameworks that facilitate expertise in moral domains. As with other areas of expertise, after considerable time in practice and training, work in the domain of expertise seems to require less cognitive effort, and actions in the domain appear to simply “come naturally” without conscious effort.

A current emphasis in character education approaches is the call to implement and investigate a developmental systems approach that takes into account embedded and overlapping realms of influence, from biology and genetics, to the family, neighborhood, community, schools, media, religious organizations, legal and medical environment, and more. While such an approach may focus on strengths or weaknesses or both, in the past the typical emphasis has been on youth problems rather than on youth virtues. Recently, however, positive psychologists and scholars whose work has relevance for positive psychology have begun to examine concepts related to positive youth development including prevention, resiliency, thriving, and flourishing. One approach that counters the deficits model aims to help children develop competence, confidence, character, caring, and compassion. Another approach has identified several dozen “developmental assets,” some of which are internal and some of which are external to the individual youth. Internal assets include caring, integrity, honesty, responsibility, cultural competence, resistance skills, conflict resolution, self-esteem, and more. External assets include family support, caring schools and neighborhoods, parental support, high expectations, youth programs, religious participation, positive peer influence, and adult role models. The developmental assets approach fits clearly with an ecological biopscho-social-spiritual model that emphasizes the multiple dimensions of influence on developing youth. Such an integrative systems view seems to be likely to influence research and program development for some years.

Service learning, a type of learning that aims to promote community service and civic engagement, has become increasingly common in schools, colleges, and universities. The idea is that through offering opportunities for actual moral action, as opposed to conducting hypothetical intellectual conversations on moral dilemmas, desired outcomes may result, such as increased civic participation, increased conflict resolution skills, and cooperation. An important concept in service learning is that in addition to the community service it involves, students are to incorporate clearly defined academic learning objectives as part of their self-reflection process. Such academic work may involve process papers, reflection papers, and term papers that utilize academic research to inform the service learning placement work. Research on service learning indicates that it

often increases students' sense of responsibility, happiness, awareness of moral and political issues, and even academic grades. Some research indicates that students who complete service learning placements are less likely to stereotype disadvantaged community members. While some scholars may be careful to distinguish character education from service learning, since service learning may not necessarily involve direct instruction from teacher to student of moral virtues, it is clear that some of the outcomes from service learning programs match those outcomes desired by proponents of conventional character education programs.

Recently, more work has been directed at evaluation of organized youth activities, in addition to the work on service learning. Compared to informal socializing with peers and to formal academic classes, evidence demonstrates that organized youth activities may be the preferred context for exploring identity, learning anger and stress management skills, and learning teamwork and leadership skills.

## **Methods**

A number of methodological issues surround character education. One major issue is whether operational definitions and research concepts should be grounded in psychological research, educational research, or perhaps in research from other relevant fields such as philosophy, theology, and political science. The relevant psychological research is most closely related to cognitive and developmental psychology, but can also be found in motivation, personality, and social cognition. The relevant educational research is often located in the research on teaching and learning, particularly curriculum development. In philosophy, clearly an understanding of ethics is relevant. In political science, work on factors regarding civic engagement may inform character education. Understanding the values and aims of various faith traditions is a strength of the theological approach.

Each discipline brings its own history, methods, and controversies. To develop and to implement a successful character education program requires some knowledge of each of these fields. Too often, turf wars, often over definitions of terms, lead to rival factions working at cross-purposes rather than uniting towards a common superordinate goal of a character education that promotes positive youth development. Scholars who choose not to learn the terms and concepts of related fields run the risk of being misunderstood, being simply wrong, and perhaps expending wasted energy reinventing concepts and approaches that have previously been developed under other names in related fields. At times, it seems that controversies align with politics more than with data, and that political rivalries are delineated by the use of terms that may mark one as liberal or conservative, religious or agnostic.

Debates over methods concern the value and appropriateness of quantitative versus qualitative methods and the type and design of program evaluations.

Another methodological debate concerns the nature of the relationship between moral reasoning and moral behavior. Particularly with Kohlbergian and neo-Kohlbergian approaches, such as those that rely on moral dilemmas, indirect education, and values clarification, a controversy exists as to whether such approaches can or should be evaluated with measures of behavior in real-world settings. Self-reports on questionnaires are often subject to wishful thinking, social desirability bias, and intentional deception, especially when the subject matter under investigation is controversial. The extent to which research on various character education programs is influenced by such methodological challenges is a matter of considerable importance.

## **Future Directions**

Future directions for research in character education are likely to include less of a focus on individual-level character and more of a focus on characteristics of families, schools, and communities that foster positive development, such as clearly articulating a school's mission statement and encouraging civic literacy through student-led discussion and community activities. Noting the frequent ineffectiveness of historical attempts to promote character through techniques including passive memorizing of moral codes, such as the Ten Commandments or the Pledge of Allegiance, positive psychologist Christopher Peterson reflects on his own education, remarking, "After all, I stared for years at the periodic table of elements in front of a classroom, and I certainly did not become a chemist" (2006, p. 284). While certain elements of the path to the good person, school, family, community, and society remain to be clarified, it seems clear that a hallmark of the positive psychology approach promises to be active student engagement both in the classroom and in the community.

Future researchers will probably desire to investigate more carefully the trajectory of character education across the lifespan. While most research and interventions have focused on youth for a number of reasons, including the convenience with which research participants may be recruited, what programs may be effective for children, adults, and the elderly? Are programs that are effective for youth effective for children, adults, and the elderly? Why or why not? Would it be a better investment to devote more resources to character education of younger children or to focus more on young, "emerging" adults? Future researchers might examine the impact of individual differences on change and personal transformation and the role that goodness of fit may play in establishing an effective character education program in one setting versus another setting. As much research on other educational programs suggests, a one-size-fits-all approach to character education programs may be problematic. Program development would appear to require knowledge of both psychology and of education. An ideal program in one school district may be a failure in another. Researchers will want to clarify and specify the factors associated with such differential outcomes.

SEE ALSO: ► Civic responsibility and virtues ► Moral judgment  
 ► Peterson, Christopher ► Positive social media ► Values

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## Character Strengths (VIA)

Nansook Park

*University of Rhode Island*

What is good character, and how can we assess it? Answers to these questions concern traditional moral philosophy as well as contemporary positive psychologists. In recent years, there has been a deliberate effort to answer them scientifically. The resulting project – the Values in Action (VIA) Classification of Strengths – focuses on what is right about people and specifically about the strengths of character that make the good life possible. The project first identified consensual components of character and then devised ways to assess these components as individual differences.

*Virtues* are the core characteristics valued by moral philosophers and religious thinkers. These may be universal, perhaps grounded in biology through an evolutionary process that selected for these predispositions toward moral excellence as means of solving the important tasks necessary for survival of the species. *Character* is the entire set of positive traits that have emerged across cultures and throughout history as important for the good life. *Character strengths* are the psychological ingredients – processes or mechanisms – that define the virtues. They are distinguishable routes to displaying one or another of the virtues. Character strengths are the subset of personality traits on which we place moral value. Introversion and extraversion, for example, are traits with no moral weight. Kindness and teamwork in contrast are morally valued, which is why they are considered character strengths.

By implication, therefore, good character is:

- a family of individual differences: in principle distinct strengths that people possess to varying degrees;
- shown in thoughts, feelings, and actions;
- malleable;
- measurable; and
- subject to numerous influences, proximal and distal.

The VIA Classification identifies 24 character strengths organized under six broad virtues. The most general use of the term VIA is to describe a vocabulary for psychologically-informed discourse on the personal qualities of a person that make him or her worthy of moral praise.

Good character has been of interest to parents, educators, politicians and scholars across history and place. Although specific definitions of good character may vary across different eras and cultures, emphasis on the importance of character and virtues for personal and societal well-being has been constant. Especially, Athenian philosophers such as Socrates and Plato discussed morality in terms of good character and in particular, virtues – traits of character that make someone a good person. This framing changed as the influence of Christianity grew. Morally correct conduct no longer resulted from inner virtues but rather from obedience to God’s commandments. The overall focus of moral philosophy therefore changed from identifying the characteristics of a good person to articulating the right things to do. As Christianity waned in importance, human reason was reintroduced, but the focus of moral philosophy remained on specifying the rules of right conduct. In more recent decades, philosophy rediscovered the ethics of virtue. Virtue ethics is the contemporary philosophical approach to strengths of character. Virtues characterize people and the lives that they actually lead. Scientific psychology is not able to prescribe the morally good life, but it is well equipped to describe the what, how, and why of good character.

In recent years, positive psychologists led by Christopher Peterson have reclaimed good character and virtue as an important topic of study. Their VIA project describes important strengths of character and proposes ways to measure them. Positive psychology is concerned not just with positive states like emotions but also with more enduring characteristics of the individual: talents, abilities, values, and strengths of character. Positive traits lead to flourishing not only by enabling positive emotions but also in their own right by facilitating lives characterized by engagement, meaning, and fulfilling relationships with others.

## **Background**

The study of character strengths in positive psychology began in 1999 when a core group of scholars assembled to create a tentative list of human strengths, in the hope that this list would serve as the basis for a more general framework of positive traits. Christopher Peterson and Martin Seligman continued this work, elaborating the initial list, presenting it at various conferences, and refining it after suggestions from conference participants. Between conferences, they devised a framework for defining and conceptualizing strengths. Also critical were surveys of literatures that addressed good character, from psychiatry, youth development, philosophy, and of course psychology and virtue-relevant messages encountered in everyday life and popular culture. Another component of the project was the development of ways to assess character strengths.

As already explained, the VIA project approaches good character as a family of widely-valued traits, each of which exists in degrees and are manifest in a range of thoughts, feelings, and behaviors. At present, the classification is not wedded to a given theory. An impetus for the project was the need to know more about good character, and no consensual theory had emerged within psychology or elsewhere. The classification is best described as aspirational, meaning that it attempts to specify mutually exclusive and exhaustive categories of moral traits without claiming finality or a deep theory.

## **VIA Classification**

The VIA Classification organizes character strengths in terms of a framework that emerged from a literature review of the texts of the world's influential religious and philosophical traditions. A core set of virtues was acknowledged as important in all of these traditions:

- wisdom and knowledge – cognitive strengths entailing the acquisition and use of knowledge;
- courage – emotional strengths involving the exercise of will to accomplish goals in the face of opposition, external or internal;
- humanity – interpersonal strengths that involve “tending and befriending” others;
- justice – civic strengths underlying healthy community life;
- temperance – strengths protecting against excess; and
- transcendence – strengths that forge connections to the larger universe and provide meaning.

In its current form, the VIA Classification includes 24 positive traits organized in terms of these six core virtues (see Table 2).

The hierarchical organization – strengths under virtues – is a conceptual scheme and not a hypothesis to be tested with data. Indeed, empirical investigations of the structuring of character strengths yield a coherent picture but not exactly the one implied in Table 2. The VIA project is a work in progress. Changes in the classification are to be expected as empirical data accumulate.

## **Measurement**

Various ways to measure the 24 VIA strengths have been devised, including self-report questionnaires suitable for adults (Values In Action-Inventory of Strengths [VIA-IS]) and young people (VIA-Youth); structured interviews to identify what are called signature strengths; informant reports of how target individuals rise to the occasion (or not) with appropriate strengths of character (e.g., hope when

**Table 2** VIA Classification of Strengths.

<i>Classification</i>	<i>Strengths</i>
Wisdom and knowledge	<ul style="list-style-type: none"> <li>• Creativity: thinking of novel and productive ways to do things</li> <li>• Curiosity: taking an interest in all of ongoing experience</li> <li>• Open-mindedness: thinking things through and examining them from all sides</li> <li>• Love of learning: mastering new skills, topics, and bodies of knowledge</li> <li>• Perspective: being able to provide wise counsel to others</li> </ul>
Courage	<ul style="list-style-type: none"> <li>• Authenticity: speaking the truth and presenting oneself in a genuine way</li> <li>• Bravery: <i>not</i> shrinking from threat, challenge, difficulty, or pain</li> <li>• Perseverance: finishing what one starts</li> <li>• Zest: approaching life with excitement and energy</li> </ul>
Humanity	<ul style="list-style-type: none"> <li>• Kindness: doing favors and good deeds for others</li> <li>• Love: valuing close relations with others</li> <li>• Social intelligence: being aware of the motives and feelings of self and others</li> </ul>
Justice	<ul style="list-style-type: none"> <li>• Fairness: treating all people the same according to notions of fairness and justice</li> <li>• Leadership: organizing group activities and seeing that they happen</li> <li>• Teamwork: working well as member of a group or team</li> </ul>
Temperance	<ul style="list-style-type: none"> <li>• Forgiveness: forgiving those who have done wrong</li> <li>• Modesty: letting one's accomplishments speak for themselves</li> <li>• Prudence: being careful about one's choices; <i>not</i> saying or doing things that might later be regretted</li> <li>• Self-regulation: regulating what one feels and does</li> </ul>
Transcendence	<ul style="list-style-type: none"> <li>• Appreciation of beauty and excellence: noticing and appreciating beauty excellence, and/or skilled performance in all domains of life</li> <li>• Gratitude: being aware of and thankful for the good things that happen</li> <li>• Hope: expecting the best and working to achieve it</li> <li>• Humor: liking to laugh and joke; bringing smiles to other people</li> <li>• Religiousness: having coherent beliefs about the higher purpose and meaning of life</li> </ul>

*Source:* Values in Action Institute (VIA)

encountering setbacks); a content analysis procedure for assessing character strengths from unstructured descriptions of self and others; and strategies for scoring positive traits from archived material like obituaries. The internal consistency of the questionnaire measures has been established as well as test-retest stability



over several months. Their validity has been investigated with the known-groups procedure and more generally by mapping out their correlates.

These measures of the VIA strengths allow a systematic study of character in multidimensional terms. Past research on good character has focused on one component of character at a time, leaving unanswered questions about the underlying structure of character within an individual. Some individuals may be creative and authentic but are neither brave nor kind, or vice versa. Furthermore, measuring a full range of positive traits may reduce concerns about socially desirable responding by allowing most research participants to say something good about themselves. Although some people may be low in most of the strengths in our classification, when compared to others, the data show that virtually everyone has defining strengths of character within themselves. VIA measures not only allow the comparison of character strengths across individuals but also within individuals. That is, the surveys can be scored ipsatively – identifying an individual's *signature strengths* relative to his or her other strengths. One hypothesis is that identifying and exercising these signature strengths may lead to psychologically flourishing life.

## Research Findings

A study with adult respondents from 54 nations and all 50 U.S. states found surprising convergence in the relative prevalence of the 24 different VIA strengths. In almost all nations on all continents, the most commonly-endorsed strengths were kindness, fairness, authenticity, gratitude, and open-mindedness, and the lesser strengths included prudence, modesty, and self-regulation. Except for religiousness, comparisons within the U.S. sample showed no differences as a function of state or geographical region. These results may reveal something about universal human nature and/or the character requirements minimally needed for a viable society.

Demographic correlates of the VIA strengths within the U.S. sample are modest but sensible. Females usually score higher than males for the interpersonal strengths of gratitude, kindness, and love. Older adults usually score higher than younger adults on strengths of temperance. Respondents with more education love learning more than those with less education. Those who are married are more forgiving than those who are unmarried. African Americans and Asian Americans are usually more religious than European Americans.

There are differences and similarities in strengths across developmental stages in strengths. In contrast to adults, the most common strengths among youth are gratitude, humor, and love, and the lesser strengths include prudence, forgiveness, religiousness, and self-regulation. Hope, teamwork, and zest are relatively more common among youth than adults, whereas appreciation of beauty, authenticity, leadership, and open-mindedness were relatively more common among adults than youth. These results are consistent with what is known about psychosocial development.

Evidence concerning the correlates of the VIA strengths is accumulating, and it is clear that certain character strengths are linked to well-being. Among adults, several strengths in particular show a robust relation with life satisfaction, happiness, and psychological well-being measured in different ways: love, gratitude, hope, curiosity, and zest. Among youth, the robust predictors of life satisfaction are love, gratitude, hope, and zest. And among very young children between three and nine years-of-age, those described by their parents as showing love, zest, and hope are also described as happy. Thus, the character strengths of love, hope and zest are consistently related to life satisfaction for individuals across all ages. Gratitude is associated with life satisfaction for individuals seven years-of-age and older. Perhaps a strength such as gratitude requires cognitive maturation. Although cross-sectional, these data considered together imply a developmental sequence to the most fulfilling character strengths. The strengths that contribute to well-being at younger ages continue to be important, but additional strengths enter the picture with maturation.

In addition, balance among character strengths and its relationship with life satisfaction has been examined. People whose character strengths have lower standard deviations – i.e., whose scores are less discrepant with one another and arguably more balanced – report higher life satisfaction, especially if they are older adults. Perhaps the integration of one's strengths with maturity reflects wisdom. Although this finding is intriguing, further investigation is needed to validate this finding.

In several retrospective studies, the effects of life events on character strengths and life satisfaction were examined, with sensible patterns resulting. Histories of physical illness or psychological disorder are each associated with across-the-board lower levels of character strengths and life satisfaction, but only among those who have not recovered. Physical illness from which one has recovered is linked to high in bravery, kindness, and humor, and severe psychological disorder that has resolved is linked to high in appreciation of beauty and love of learning. Furthermore, higher levels of these strengths are related to greater life satisfaction. These findings suggest that in the wake of negative life events, certain character strengths may work as a buffer and help to maintain or even increase well-being despite challenges.

Other important aspects of flourishing life are also related to the character strengths in the VIA Classification. First, academic achievement among school children one year later was predicted by strengths such as perseverance, love and gratitude among others above and beyond their IQ scores. Second, love was the strongest predictor for military performance among West Point cadets evaluated by their commanding officers and peers in a one-year longitudinal study. Third, teaching effectiveness assessed by student performance on standardized tests was longitudinally predicted by teacher's zest, humor, and social intelligence. Fourth, life satisfaction among children was related by self-regulation of their parents, although this strength was not strongly related to parents' own life satisfaction. Fifth, people with high zest perceive their job as a calling and have higher satisfaction at work.

Given the importance of character to the psychological good life, questions of course arise about how good character might be cultivated. This work is in its infancy, and to date, only a handful of character strengths have been seriously considered. A few intervention studies have addressed character in multidimensional terms. In one such study, adults completed the VIA-IS and identified their top strengths, which they were then asked to use in novel ways. Relative to a comparison group without this instruction, these individuals showed meaningful increases in happiness as well as decreases in depression for up to six months of follow-up. Not surprisingly, these changes were evident only if research participants continued to find new ways to use their strengths. Finding *novel* ways to use strengths is therefore critical and reflects the importance of ongoing personal growth in producing a flourishing life.

## Future Directions

Future studies will continue to refine measures and to use empirical findings to generate theory. Our attention is increasingly turning to hard outcome measures such as health, work productivity and educational achievement, to cultural differences and similarities, to development, to interventions, and to the processes by which strengths of character give rise to actual behavior. The VIA project supports the premise of positive psychology that attention to good character – what a person does well – sheds light on what makes life worth living.

SEE ALSO: ► Peterson, Christopher ► Virtues

## Charisma

Ronald E. Riggio

*Claremont McKenna College*

Charisma is a constellation of personal characteristics or qualities that allow an individual to have impact on others by affecting their feelings, thoughts, and behaviors. Yet, charisma is still an elusive construct, but one that has been studied by the fields of psychology, leadership, political science, sociology, and communication. The original definition of charisma is a “divine gift of grace or power,” and there are religious connotations associated with it. However, psychological perspectives on charisma view it as a personal ability or quality (personal charisma), whereas sociologists have focused on the charismatic relationship, such as that between a charismatic leader and follower. Charisma is tied to positive psychology because charismatic individuals are inspiring, upbeat, optimistic, charming, and socially-skilled.

## Theories of Charisma

Sociologist Max Weber explored charisma in his notion of “charismatic authority.” Although Weber believed that charismatic leaders possessed some “extraordinary qualities” that captivated others, he asserted that the key to a leader’s charisma was in the relationship between leader and follower. Followers’ belief in and dedication to the charismatic leader gave the leader extraordinary power to inspire, motivate, and control followers. Weber also emphasized that charismatic leaders emerge during times of turmoil and that they are associated with a change in the status quo.

Psychoanalytic theories of charisma suggest that followers instill leaders with charisma and view charismatic leaders as able to satisfy their psychological needs. According to this theory, followers are drawn to certain leaders because they have some attractive qualities or distinct characteristics (e.g., foreign accent). Charismatic leaders also may have appeal to followers because they provide promise of change, salvation, or a better way of life.

Leadership scholar Jay Conger suggests that leaders possess certain behavioral traits that cause others to perceive them as charismatic. These qualities include the ability to motivate and inspire others, sensitivity to followers’ needs, skill in formulating and articulating a compelling vision, and the ability to detect unexploited opportunities. Conger also emphasizes that the charismatic leader’s behaviors must fit the particular leadership situation for the charismatic process to occur. Elements of charisma, particularly the ability to inspire followers and the sensitivity to followers’ needs are components of the transformational theory of leadership.

Another approach focuses more on the personal elements of charisma, apart from whether the person is a leader or not. According to this perspective, personal charisma is a constellation of highly developed skills in emotional and interpersonal communication, and represents persons with exceptional levels of emotional and interpersonal competence. Although there are several different communication skills that make up personal charisma, it is skill in emotional communication, particularly emotional expressiveness, which is most commonly associated with charisma. In addition to being emotionally expressive, personal charisma is also composed of emotional sensitivity, the ability to regulate emotions (all key elements of emotional intelligence), verbal speaking skill, the ability to engage others in conversation, knowledge of social roles and norms, and the ability to role-play in social situations. These latter elements are commonly associated with social competence or social intelligence.

An important concern is that charisma and charismatic leadership involves the ability to captivate, inspire, and influence others. There is, however, no consideration of the morality or ethics of charismatic individuals and leaders. In other words, while many charismatic leaders, such as Mohandas Gandhi, Martin Luther King, Jr., and the Archbishop Desmond Tutu, have been motivated to have a positive, beneficial impact on followers and on the collective, there are many

charismatic leaders, such as Hitler, Josef Stalin, and Osama Bin Laden, who have had destructive impact on society and followers.

## Research on Charisma

Conger and Kanungo have developed a scale that measures followers' perceptions of their leaders' charisma. In addition, the Multifactor Leadership Questionnaire, or MLQ, also measures charismatic leadership as part of an overall assessment of transformational leadership. A self-report measure, the Social Skills Inventory, is used to measure personal charisma, by assessing six core emotional and social skills. All of these instruments have been used to study charisma and charismatic leaders.

Extensive research has demonstrated that individuals who possess high levels of personal charisma are more likely to emerge as leaders in small groups and be evaluated as potential leaders, than persons lacking the communication and social skills that underlie charisma. In addition, charismatic individuals are evaluated more positively in initial encounters, are perceived as more physically attractive (even when controlling for static qualities of "beauty"), and they held jobs and positions that allowed them more interaction with others. Socially-skilled, charismatic persons also were more successful at deception, not necessarily because they were good liars, but because they were perceived by others as more "honest" overall, regardless of whether they were telling the truth or lying.

There is also some evidence that persons with personal charisma have higher levels of well-being than those lacking charisma. For example, charismatic individuals have greater social networks, report that they are less lonely, have higher self-confidence, and are more satisfied with their lives. In addition, socially-skilled, charismatic individuals may be better able to cope with life stress, primarily due to their large and supportive social support networks.

Research on the emotional contagion process has led to a better understanding of how charismatic individuals and leaders are able to emotionally arouse and inspire others. In one study, emotionally expressive, charismatic persons were paired with unexpressive individuals in a waiting room. Without speaking, the unexpressive persons' tended to be "infected" by the mood of the expressive individual. Charismatic leaders, such as former U.S. President Ronald Reagan and California Governor Arnold Schwarzenegger, also may be particularly effective because they are good at enacting emotions and well-trained to play social roles – important elements of personal charisma.

Consistent with theories that suggest that charisma is partly in the "eyes of the followers," there is evidence that certain individuals resonate better to particular charismatic leaders. For example, few Westerners would find Osama Bin Laden personally appealing and charismatic, whereas few Middle Easterners might feel that Ronald Reagan was charismatic. Yet, it is important to emphasize that both of these leaders possess the critical communication and emotional skills that

constitute personal charisma. At a more general level, some persons may be more prone to a charismatic leader's emotional appeal (more emotionally sensitive and subject to emotional contagion), or may be more easily persuaded by charismatic people.

There has been, and continues to be, considerable interest in charismatic leadership, with much of this research subsumed under research on transformational leadership. One line of research has estimated the charisma of U.S. presidents and demonstrated that more charismatic U.S. presidents tended to be more effective in dealing with domestic affairs and the national economy – factors that have the most direct impact on followers.

Although there are many popular programs that purport to train people to be more charismatic, except for some dissertation research and a few pilot studies, there has not been a large-scale investigation of whether charisma is trainable. Yet, this preliminary research suggests that training people to be more socially-skilled and better emotional communicators does indeed seem to increase ratings of an individual's charisma.

While there is great popular interest in charisma, there has been surprisingly little attention from the scientific community, apart from the work on charismatic leadership. Given the connections between possession of personal charisma (as defined by high-levels of skill in emotional and interpersonal communication) and social effectiveness and psychosocial adjustment, it appears that greater attention to understanding charisma is warranted.

SEE ALSO: ► Emotional intelligence ► Organizational psychology  
► Positive emotions ► Social skills ► Transformational leadership

## **Cheerfulness**

Karin Sommer and Willibald Ruch

*University of Zurich, Switzerland*

Cheerfulness represents an individual's actual (as a mood state) or habitual (as a trait or temperament) disposition for amusement and laughter and seeing the bright side of life including taking adversity less seriously. State and trait cheerfulness contribute to the good life by enabling individuals to achieve positive emotions and maintain them.

## **Approaches to Cheerfulness**

Cheerfulness as a temperamental trait received theoretical and experimental attention by both German and American personality psychologists at the beginning of the last century. Meumann regarded cheerfulness as one of twelve basic

temperaments equal to the sanguine, choleric or melancholic temperament in 1913. He devised a two-dimensional framework in order to describe the concepts by the dimensions of pleasure-displeasure (e.g., separating cheerful from serious and grumpy) and shallow-profound nature (e.g., separating grumpy from cheerful and serious). Schneider on the other hand located cheerfulness as a general factor with a pleasure-displeasure dimension in 1950. He conceptualized seriousness as the first stage on the displeasure side, whereas cheerfulness and sadness were considered markers of the pleasure and displeasure sides, respectively. Lersch drew a distinction between cheerfulness and hilarity/merriment in 1938. In his phenomenological account, these two concepts share the elements of inner brightness, lightness, and relaxation. But while cheerfulness is contemplative, pensive, profound, calm and inward, hilarity is thoughtless, superficial, shallow and outwardly directed. When outlining his concept of cheerfulness, Lersch described associated behaviors and traits. For example, he claimed that a cheerful person has a positive attitude toward the world, is able to enjoy things, is sociable and meets fellow creatures with goodwill and benevolence. Cheerfulness and nervousness, but also envy, distrust, malice, and all sorts of aggression tend to exclude each other. Young generated the first evidence in 1937 for the relevance of state cheerfulness when he found a positive correlation between retrospectively reported cheerful mood during the last 24 hours and laughter during that period.

More recently, Ruch and Koehler (1998) drew a distinction between *trait cheerfulness* as an innate affect-based temperament and *state cheerfulness* as a transient mood. They argued that the disposition for laughter and amusement varies both interindividually (i.e., between people) and intraindividually (i.e., across situations) and both are needed to account for individuals' readiness for positive emotions and laughter. In their "state-trait model of cheerfulness" (p. 204) both state and trait cheerfulness were operationalized with the help of facets or definitional components. Based on different sources (e.g., lexical studies, studies of prior literature and prior factor analytic work on humor questionnaires) they found that trait cheerfulness is composed of five intercorrelated components, namely a prevalence of cheerful mood (CH1), a low threshold for smiling and laughter (CH2), a composed view of adverse life circumstances (CH3), a broad range of active elicitors of cheerfulness and smiling or laughter (CH4) and a generally cheerful interaction style (CH5). While trait cheerfulness is a one-dimensional concept, empirical evaluation also allows distinguishing between cheerfulness and hilarity, as sketched earlier by Lersch. The study of state cheerfulness involved the playful induction of different forms of positive mood (e.g., via jokes and cartoons, funny videos, humorous interactions, laughing gas) and the assessment of the resulting mood state via a comprehensive set of words relating to cheerfulness as a state. Empirical analyses suggested a differentiation in two highly correlated components akin to trait cheerfulness. State cheerfulness is defined by the presence of 1) a cheerful mood state, which is tranquil and composed, as well as by the presence of 2) hilarity, which is a merry mood state, shallow and outwardly directed.

## **The Measurement of Cheerfulness as Trait and State**

In order to provide a reliable, valid, and economical assessment of cheerfulness as a trait and as a state, the State-Trait-Cheerfulness-Inventory (STCI) was developed Ruch, Koehler, and van Thriel by pursuing a rational-theoretical construction strategy. In addition to cheerfulness, the STCI measures seriousness and bad mood as states and traits. The STCI is available in different versions for children and youth and adults. For the assessment of cheerfulness as a trait (STCI-T) a short- and long-form exist for both self- and peer-report. The STCI-S assesses state cheerfulness as a current mood state. Forms also exist to describe predominant mood states of the last week, last month or last year. All versions use a 4-point answer format (strongly disagree to strongly agree). Psychometric properties of the scales are satisfactory and replicable across countries. Cronbach alpha coefficients for the cheerfulness scale turned out to be high in different samples (.92 to .94 for the STCI-T and .93 to .94 for the STCI-S). While trait cheerfulness is relatively stable across the span of a month (retest-reliability yielded a coefficient of .84), a low coefficient (.33) was found for state cheerfulness, underscoring the fleeting nature of states. The STCI-S is sensitive to changes in the environment. When individuals are exposed to different situations (ranging from serious to humorous), their level of state cheerfulness changes accordingly. While trait cheerfulness is a desirable characteristic, the correlations between self- and peer-evaluation nevertheless turned out to be sufficiently high. There are no gender differences in cheerfulness and overall trait cheerfulness remains stable across the life span. However, one of the components ("composed view of adverse life circumstances") changes across time. After the age of 40, individuals seem to adopt a more lighthearted view of the adversities they encounter in life and this tendency increases even more after the age of 60. The scale was translated into the major Western languages and retained its psychometric properties.

## **The Relationship between State and Trait Cheerfulness and Their Role in the Induction of Amusement and Laughter**

State and trait cheerfulness are related to each other in a variety of ways. Every person is in a cheerful state now and then; however, high-trait cheerful individuals differ from low-trait cheerful individuals with respect to frequency, threshold, intensity and duration of state cheerfulness. Experiments show that individuals high in trait cheerfulness are in a cheerful state more often. Moreover, they have a lowered threshold for coming into cheerful states; i.e., it takes less to bring about a cheerful mood. Furthermore, trait cheerfulness is a predictor of the intensity of state cheerfulness. Once induced, states of cheerful mood or hilarity are more intense and last longer among the trait cheerful individuals than among low-trait cheerful individuals. Most importantly, trait cheerful individuals seem to have



enhanced thresholds for antagonistic states; i.e., it takes more to bring them out of a cheerful mood. Cheerful states of high trait cheerful individuals are more robust. Several experiments show that trait cheerful individuals “keep their humor” when facing adverse situations, while low-trait cheerful people lose their humor and get grumpy or sullen. In case of a low cheerful state, high-trait cheerful people regain a cheerful mood faster than low-trait cheerful individuals. In particular, the robustness of cheerful mood found among trait cheerful individuals suggests that trait cheerfulness lies conceptually close to “sense of humor.”

Furthermore, there is evidence that both state and trait cheerfulness are predictors of laughter and the intensity of positive affect. Experiments show that individuals in a high cheerful mood, smile and laugh more often to jokes in social situations, and the laughter of a model is contagious only for them. Trait cheerful individuals are more likely to laugh than individuals low in trait cheerfulness when involved in a silly interview, inhaling nitrous oxide or watching funny films. In one of the first experimental laboratory studies in differential psychology in 1919, Morgan, Mull, and Washburn demonstrated that cheerful people recall more pleasant terms (and less unpleasant ones) than depressed persons, who showed the opposite pattern.

## The Role of Cheerfulness in Humor

Both theoretical and empirical accounts point toward cheerfulness’ relevance for research on humor. Cheerfulness as trait and state explains individual differences in readiness for amusement and predicts affect-based humor behavior like smiling and laughing. Moreover, it does also account for a variety of phenomena, such as appreciation of types of humor, quantity of humor production, and keeping or losing humor when facing adversity, and it has been shown to be a moderator of stress just as is coping humor. In order to approach the relationship between cheerfulness and sense of humor more comprehensively, the relationship of self-report inventories of sense of humor and behavioral measures of humor was investigated. Joint factor analysis revealed that all available sense of humor scales and the facets of cheerfulness merge in a potent first factor. This broad factor comprises elements such as a prevalent cheerful mood, the tendency to smile or laugh and to be merry, coping humor and cheerful composedness, humor under stress, laughing at yourself, initiating humor/liking to entertaining others, enjoyment of humor, verbal humor, finding humor in everyday life and a positive attitude to things being related to cheerfulness and playfulness. This finding suggests that current measures of sense of humor actually account for cheerfulness rather than for humor.

Nevertheless, cheerfulness is not quite equivalent to sense of humor. As trait cheerfulness is a unipolar construct, its low pole can only partially account for the phenomena referred to as *humorlessness*. In fact, further empirical evidence suggests that the concepts of seriousness and bad mood may play a crucial role. As a consequence, it is postulated that cheerfulness, seriousness/playfulness and bad mood as traits form the temperamental basis of humor and cheerfulness/

seriousness/playfulness, and bad mood as states represent intrapersonal varying dispositions for humor. While cheerfulness facilitates the induction of smiling and laughter, seriousness and bad mood impair it. The study of the relationship between the three concepts and sense of humor is limited by the nature of the sense of humor instruments utilized so far. However, only if inventories cover humorlessness as well, can the whole range of sense of humor be comprised.

## Positive Outcomes of Cheerfulness

Cheerfulness as state and trait is relevant to the study of the good life. They seem to represent personal resources for positive mood and laughter. Trait cheerfulness is a predictor of satisfaction with life among children as early as the ages between 10 and 14 years. Furthermore, trait cheerfulness is positively related to the life of pleasure (but also to a minor extent to life of engagement and meaning) for this age group. Trait cheerfulness predicts life satisfaction even when the effects of the three orientations to happiness are being controlled for. This might be, in part, because trait cheerfulness is an antagonist to the effects of adversity on mood state. In fact, previous experimental studies show that high-trait cheerful individuals cope not only better with experimentally induced adversity, but also with stress in everyday life; they use healthier coping strategies such as relaxation to deal with stress than low-trait cheerful people. Moreover, high-trait cheerful persons report less psychosomatic disturbance such as headaches, tonicity, or cardiac and circulatory troubles and react differently to experimentally induced pain. All in all, cheerfulness contributes to the good life by bringing about a positive effect and helping to maintain it when facing adversity.

SEE ALSO: ► Global well-being ► Humor ► Laughter ► Physical health  
► Smiles

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## Chinese Positive Psychology

Paul T. P. Wong  
*Tyndale University College*

Culture affects us in numerous and significant ways. It influences how we think, what we value, how we behave and how we cope. Culture shapes psychology,

especially positive psychology (PP), because it is value-laden. There is increasing evidence that cultural values and cultural beliefs influence such matters as what constitutes the good life and optimal functioning.

Integration between Eastern and Western perspectives of PP would be a good start towards internalizing PP.

## **What Constitutes Being Chinese**

Culture is a multidimensional construct that encompasses people, history, geography, politics, customs, language, and influential philosophies and religions. Being Chinese means at least three things: descendants of the Chinese race, bearers of the burdens of Chinese history, and recipients of traditional Chinese cultural beliefs. These are the three common elements shared by Chinese people everywhere.

The Chinese people may have been selectively bred for their capacity to endure and adapt to adversities over the past five thousand years. Being the largest nation with the longest history gives the Chinese people a sense of national pride; their experience of humiliation in the last 200 years has served to strengthen both their patriotism and their motivation to regain former glories. The accumulated wisdom from historical lessons and teachings of Confucianism, Taoism, and Buddhism have provided helpful frameworks for the Chinese to cope with the hardships and vicissitudes of life. At a more molecular level, their ways of thinking and their unique language system may have restructured their brains and predisposed them to perceive the world in unique ways. Together, these factors shape the Chinese PP.

## **Overview of the Article**

This article first briefly introduces Confucianism, Taoism, and Buddhism as the cornerstones of traditional Chinese culture. These dominant schools of philosophy provide three useful conceptual frameworks for Chinese PP.

The article then identifies the six pillars of Chinese cultural beliefs and shows how these beliefs contribute to the unique set of signature strengths and virtues of the Chinese people. Finally, suggestions are made for future directions of research on Chinese PP.

## **Three Dominant Chinese Philosophies**

### **Confucianism**

Founded by Confucius (Kung Fu-tze, 551–479 BC) and elaborated by Mencius (372–289 BC), Confucianism is most responsible for shaping the Chinese culture.

Witnessing the decay of social order and escalation of wars, Confucius sought to realize the ideal of social stability and world peace through the cultivation of individual virtues. His teachings on personal and political ethics were recorded by his students in the *Analects*.

Confucius taught that educated gentlemen should practice the following five virtues in order to live a happy and harmonious life:

- *Yen* is the virtue of benevolence, kindness, compassion, and humanity.
- *Yi* is the virtue of righteousness and uprightness. *Yi* also encompasses *zhong* (faithfulness, loyalty and conscientiousness) and *shu* (forgiveness, altruism and consideration of others).
- *Li* is the virtue of propriety, politeness and good manners. It dictates what constitutes correct behavior in different kinds of relationships, e.g., filial piety for children towards parents and respect for authority.
- *Zhi* is the virtue of knowledge, prudence and wisdom, which can be acquired from studying the classics and learning from others.
- *Xin* is the virtue of faithfulness and integrity, which inspires trust.

In sum, the good life consists of finding one's proper place in society and dutifully performing one's role. Confucianism discourages the self-centered pursuit of individual happiness and success, because such pursuit will disrupt social order and harmony.

## Taoism

Taoism advocates the ideal of returning to the simple and natural way of life as a way of coping with the hardships and uncertainties of life. It was founded by Lao Tze and elaborated by Zhung Tze. The word *Tao* literally means "the way" or the "the way of nature" – the ultimate creative principle that gives birth to the universe and nourishes everything in the cosmos.

One of the profound insights of Lao Tze is the duality of nature. All things in nature exist in duality or polarity. The two opposites complement each other and make the existence of each other possible. Goodness does not exist without evil. Happiness does not exist without unhappiness. Lao Tze observes: "Fortune owes its existence to misfortune, and misfortune is hidden in fortune" (quoted by Chen, 2006, p. 92).

When the negative and positive are seen as an integrated whole, problems and stress disappear. According to this dualistic view, one's strength may contain the seed of self-destruction, while strength may be hidden in one's weakness. It is never wise to exclusively focus on developing one's signature strengths or maximizing positive experiences without addressing the negative aspects of life.

Related to duality is the ubiquitous pattern of change. Things in nature are cyclical – day and night, change of seasons, life and death, etc. Everything reverses to its opposite. Reversals of fortune are the way of nature. Therefore, we should

not be overjoyed when times are good or be depressed when times are bad. To know the principles of duality and change is the key to adapting effectively to the vicissitudes of life. The wisdom of being flexible and accepting setbacks enables one to take things in stride.

Taoism teaches contentment as a natural way of life. It teaches us not only how to be free from worries, but also how to achieve happiness even when the problems are pervasive, chronic and beyond one's control. Taoism emphasizes that craving for happiness and success leads to moral depravity and personal destruction, while contentment leads to happiness and health. Contentment involves overcoming cravings when times are good and overcoming worries when times are bad; thus, contentment is always there regardless of reversals of fortune. Contentment leads to humble, selfless devotion to the well-being of humanity.

Following the natural way of life also means learning the wisdom of "do nothing." If we learn to let go of our striving and accept life as it is, we will be freed from many unnecessary pains. Surrender our own impulse to strive and control, and let nature take its course. The art of "do nothing" comes from meditation and learning the wisdom of the Way, which is the ultimate guarantee of happiness and contentment.

### The Buddhist Perspective

Buddhism was founded by Siddhartha Gautama as a system of mental cultivation in order to achieve spiritual liberation from suffering through awakening of the mind from delusion and greed. Mahayana Buddhism (great vehicle) was later developed in China which stresses the ideal of Bodhisattvas – enlightened individuals who are moved by compassion to save all sentient beings from sufferings.

The basic tenets of Buddhism are the Four Noble Truths:

1. The Truth of Suffering (Dukkha) – Life is full of suffering. This realization is the necessary first step towards enlightenment. Suffering includes not only pain and distress caused by adversities, but also mental vexation, frustration, disappointment, and anxiety that come from greed, ignorance and attachments to worldly possession.
2. The Truth of the Cause of Suffering (Tanha) – Suffering comes from craving for happiness and aversion of pain; both of these psychological mechanisms are rooted in primordial ignorance and delusion about life. Craving for happiness necessarily causes us to fear or reject anything that causes unhappiness or pain. Attachment to possessions and achievement invariably leads to disappointment and disillusionment, because everything is impermanent. Thus, failure to embrace life's experience in its entirety is at the root of suffering.
3. The Truth of Liberation from suffering (Nirvana) – We can be liberated from suffering by transforming our craving and aversion through enlightenment. When we attain this state of perfect peace, serenity and compassion, we

are free from greed, hatred and delusion. This state also transcends all dualities, such as death and rebirth.

4. The Truth of the Eightfold Path (Magga) – Liberation through enlightenment can be achieved through the eightfold path. The eight disciplines can be grouped into three categories:
  - (a) Morality – right speech, right action, right living, right effort
  - (b) Meditation – right mindfulness, right meditation
  - (c) Wisdom – right thought, right understanding

Mindful meditation is an essential exercise in the process of attaining enlightenment. It cultivates awareness and concentration, while remaining non-judgmental, regardless of what happens externally or internally. It develops the mental condition of focusing, self-acceptance and self-transcendence.

Compassion is a natural outcome of enlightenment and wisdom. An enlightened view of the self leads to compassion. Wisdom leads one to surrender ego to be part of the larger self; the practice of love and compassion leads to wisdom.

Buddhism does not seek to relieve people's suffering and make them feel happy. Instead, it seeks to free them from ignorance and craving. Healing and happiness are the byproducts of enlightenment and compassion rather than the results of worldly success.

## **Cultural Beliefs or Worldviews**

Worldviews are assumptions and beliefs based on history, experience and influential thinkers of a particular culture. The following six cultural beliefs are dominant in the Chinese way of thinking: uncontrollability of the world, ubiquity of change, fatalism, dualism, collectivism and utility of efforts.

The first two worldviews reflect the perceived harsh realities of life; the other four worldviews reflect psychological adaptations to such perceptions and beliefs. Thus, unlike American PP, the Chinese PP begins with the assumptions that normal life is mostly negative and beyond one's control. As a result, Chinese PP focuses on strengths and virtues that enable them to survive extreme adversities.

### **Uncontrollability of the World**

People perceive the external world as largely beyond their control. Individuals are not able to prevent or control powerful cosmic, natural and political forces that impact their lives. Earth quakes, floods, draughts, and hurricanes often claim hundreds and thousands of lives. Historically, Chinese people rarely had the power to select their government through voting. Imagine yourself among the farmers living in a remote village. The only life you know is unrelenting poverty and hunger in spite of back-breaking labor. Life is at the mercy of not only the natural elements, but also the bandits and corrupt officials. There is no security and protection from

anyone. When people grow up in these kinds of harsh and unyielding conditions, it is only natural that they formulate a view that the world is uncontrollable.

### Ubiquity of Change

To the traditional Chinese people, the world is not only uncontrollable but also unpredictable. Since individuals have no control over most events and situations in their lives, they have no way to predict how life will turn out. The vast sweep of Chinese history further reinforces the perception that everything is in a flux and life is often characterized by reversals of fortune. For example, the underclass in one regime may suddenly become the upper-class when there is a regime change. As the axiom goes, life is as predictable as the weather. Confucianism tries to reduce chaos by emphasizing social orders and stable relationships. Taoism emphasizes the need to be as flexible as water in adapting to changes. Buddhism teaches people that the world as we know it is just a passing delusion. All these teachings help people face the vicissitudes of life with equanimity.

### Fatalism

It is the belief that spiritual and cosmic forces are deciding the fate of individuals and their daily affairs. Since the world is uncontrollable and unpredictable from the perspective of individuals, belief in fatalism seems to be inevitable. Divining and fortune telling have remained popular among Chinese people since the ancient days of I-Ching.

One benefit of belief in fatalism is that it makes unexplainable adversities more bearable. When one attributes suffering to karma, fate or bad luck beyond, then one is liberated from shame, guilt, or anger.

### Duality of nature

Emphasized by Taoism, the belief in duality recognizes the co-existence of opposites and accommodates discordant ideas. The symbol of Yin Yang expresses best the dynamic balance between opposites in human nature as well as in the human condition.

Chinese people have learned from thousands of years of history that suffering and evil will be forever with us and the best one can do is to maintain an uneasy balance so that good will not be overwhelmed by evil.

The Chinese PP posits the duality hypothesis – the good life can be achieved not by accentuating the positive and avoiding the negative but by embracing and integrating both the positive and the negative. This duality hypothesis can be applied to life review. One can compare the outcome of reviewing only pleasant memories and positive experiences with that of reviewing both positive and negative experiences. This duality hypothesis can also be tested in management science.

## Collectivism

Crowdedness and the enormity of life's problems make it necessary for the Chinese people to learn how to get along with each other and how to work together to find solutions. Confucianism has also instilled into the Chinese mindset the imperative of collectivist beliefs. As a result, collectivism is widespread in East Asian cultures.

Traditional Chinese people invest in developing and maintaining good relationships, and would not want to ruin friendship because of expedience or temporary gains. Loyalty to family and friends is highly valued. While expression of gratitude is considered by American PP as an exercise to increase individual happiness, it is considered by Chinese PP as essential for maintaining good relationship. To show gratitude for the good things people have done for you will enable us to forgive the bad things people have done to you. Collectivism becomes especially important when people need to depend on each other to survive corrupt and oppressive government officials.

## Utility of Efforts

If the first five cultural beliefs make Chinese people feel helpless and powerless as individuals, belief in the utility of effort reminds them of their personal responsibility to do their very best in areas where they can exercise some control. These areas include work ethics (being studious and conscientious), self-cultivation efforts (cultivation and accumulation of various virtues), and relational efforts (filial piety, loyalty towards friends, respect for authority, and harmony within the group). Considering all six cultural beliefs, the Chinese people are both high-externals and high-internals and cannot be measured by unidimensional scales.

## What is the Chinese Perspective of PP?

Given the above philosophical foundations and pillars of cultural beliefs, what are the Chinese perspectives of strengths and the good life? How are they different from the American PP perspectives?

## Chinese Signature Strengths and Virtues

The six pillars of cultural beliefs led to the development of a unique set of strengths and virtues.

- Belief in the uncontrollability of the world naturally leads to the strengths of endurance, acceptance and self-transformation. Acceptance here means more than cognitive consent or resignation. It may involve surrender of the ego and accepting one's fate. Endurance means more than goal-persistence.



A popular Chinese idiom says, “As long as the green mountain remains, there will always be a supply of firewood.” The idea is that as long as we stay alive and endure the pain, we can always stage a comeback in the future. Similarly, self-transformation means more than cognitive reframing, because it may involve a conversation type of enlightenment and spiritual transformation.

- Belief in ubiquity of changes naturally leads to the strengths of flexibility, resourcefulness, and optimism. Since everything is cyclical, there is always hope. If we are willing to be flexible and learn from nature, there is always a creative way to solve a seemingly unsolvable problem.
- Belief in duality leads to the strength of open-mindedness, tolerance and accommodation. It enables people to embrace all of life, both negative and positive. It favors the middle path, integration and holistic thinking rather than the either-or kind of linear dichotomous thinking.
- Belief in fatalism leads to the strengths of acceptance, faith and transcendence. It recognizes that the rationality has its limitations. We should always try to decipher the will of the Providence. Wars are won when there is harmony among people, geographical advantages and good luck from heaven.
- Belief in collectivism leads to the strengths of cooperation, altruism, and social capital. It also results in more stable families and organizations. There is always strength in numbers when the problem is too big for any individual.
- Belief in utility of efforts leads to the strength of conscientiousness, responsibility and hard work. If fatalism encourages dependence on Providence, and collectivism encourages interdependence between people, then utility of efforts favors independence of individual efforts.

This set of signature strengths and virtues has enabled the Chinese people to overcome extreme difficulties and survive for more than six thousand years.

### The Chinese Concept of the Good Life

Thomas Parker has made a very astute observation of the American culture:

Our culture presents the “gracious life,” the idea that one can live without conflict, pain, and deprivation if he is lucky enough to have the money, good taste, and training that will allow it. . . . The idea of the “gracious life” is wrong, because it makes no room for the struggle and agony that is an essential part of life. It assumes that happiness comes from the absence of these negative qualities rather than their acceptance as an essential part of life. (1979, pp. 25–26)

The Chinese PP embraces life in its totality and integrates both positive and negative experiences. Balance and moderation are valued more than achieving

optimal levels of functioning and happiness. Group harmony is considered more important than individual success. Contentment is the key to lasting happiness. The ideal life according to the average Chinese down through the years is: Live a plain life in peace and harmony with one family and neighbors. Happiness is found in harmonious relationship. Another Chinese idiom says, "Everything will be prosperous, when there is harmony at home."

Given the historical and cultural context of Chinese PP, it seems that the signature strengths and virtues of Chinese PP may be especially adaptive in negative situations that are pervasive and uncontrollable negative situations, such as chronic pain, terminal illness, and large-scale natural disaster. Chinese PP's dualistic hypothesis can contribute to the development of a balanced model of PP that incorporates both positive and negative experiences, and both Western and Eastern cultural values.

SEE ALSO: ► Collective well-being ► Indigenous positive psychology

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## Civic Responsibility and Virtues

Sherlyn Jimenez

*University of Connecticut*

*Civic responsibility* can be defined as an attitude or sense of obligation held by citizens toward their government and community which finds behavioral expression through civic engagement. It is a sense of social responsibility that focuses on the common good through participation in the community in an informed and committed manner. One might also define civic responsibility as constituting an active involvement with society, an understanding of interdependence with others, and an ethical allegiance to others. At times, civic responsibility is used interchangeably with civic engagement, which is the behavioral aspect of civic responsibility. *Civic engagement* itself occurs within social and political spheres of action. Volunteering, community service and charitable giving are examples of the social form of civic engagement while voting, participating in the political process, activism, protest, and staying abreast of current events are the political forms of civic engagement. Fostering civic responsibility is essential to building community, supporting collective action on common goals, and for the promotion and preservation of democratic principles. Some attitudes related to civic responsibility include the intention to serve others and the belief that helping others is one's social responsibility.

## **Factors that Influence Civic Responsibility**

Civic responsibility is influenced by psychological, social and political factors such as personal resources, socialization and institutional or structural forces. Citizens who are more apt to be politically and socially engaged tend to have higher income, advanced education and good jobs. Older individuals, homeowners and married couples are also more likely to vote and engage in voluntary work. In turn, these values are passed down to their children. On a personal level, citizens who have a deep sense of civic responsibility are more interested in politics and, show more empathic concern. A prosocial identity and concern for others was positively associated with overall prosocial behavior and willingness to help. Sense of community connectedness and residential stability also predicted civic responsibility. Strong community ties promoted greater volunteering while personal resources and helping values explained increased charitable giving. In fact, it is empathic concern and the desire to relieve the other's distress, not a sense of civic responsibility, which is related to sustained giving.

There are several factors that hinder civic responsibility: mainly general lack of personal and social resources. One should note that people with limited resources may remain engaged but face challenges to civic engagement. For example, people might have limited time available due to working multiple jobs and family care issues. Other challenges encompass neighborhood issues like problem neighbors, lack of community groups, or lack of access to transportation. Perceived safety, particularly for women, also interacts with other predictors of civic engagement, including income, residence, education, and parental and marital status, to influence levels of involvement. Civic apathy may arise in other ways. Isolation because of a recent move as well as social exclusion may reduce prosocial behavior, perhaps through a sense of alienation that may interfere with one's capacity for empathic concern, undermining any inclination to help or cooperate. Inequality, which in turn can determine interpersonal trust, has an adverse effect on community participation though not necessarily political participation. Finally, community participation decreases in communities situated in an economically and socially disadvantaged region with low-levels of education.

## **Current Emphases**

A current emphasis in education is on the promotion of civic responsibility through service learning. Thus, many of the studies on civic engagement have been in the domain of education. Service learning combines classroom instruction with community service with the goal of increasing citizenship participation as well as personal and civic responsibility. In addition to enhancing students' coursework, service learning may foster civic responsibility by providing opportunities for students to engage directly in their communities and meet the needs of their

community. In essence, through service learning, students learn to be productive members of society.

Community service has been found to enhance academic and behavioral outcomes as well as sense of civic responsibility. Students who participate in community service have higher grades, fewer behavioral problems, greater political knowledge, and come to believe that individuals have the capacity to effect change, even after controlling for demographic and socioeconomic characteristics. Additionally, community service promotes a sense of community, increased empathy, and intent to be involved in future community action compared to matched controls. Volunteer work in high school also promotes prosocial attitudes and concern for social issues and future intended service, possibly because students who perceived they were making a contribution to society were more likely to continue serving in the future. However, although mandatory community service programs may boost later volunteer efforts, it is psychological engagement in the activity which predicted change in community belonging and social responsibility in volunteers.

With regards to the sociodemographics of community service participants, girls and older students are more likely to participate in community service than boys and younger peers. European American and Asian American students are most likely to engage in service, as are students who attend private school, and whose parents are highly educated. Those mandated to do service tend to be African American or Latino/a, of lower socioeconomic class, and generally attend private and/or religious schools.

Despite the growing influence of service learning, Sander and Putnam have expressed concern that American levels of civic engagement have fallen with more recent generations. They argue that Americans have witnessed serious erosions in social capital, whether one looks at informal social connections, political participation, philanthropy, religious participation, or general trust of others. Indeed, over the years, there has been a decline in voting and involvement in political organizations. According to the U.S. Census Bureau, only 42 percent of 18- to 24-year-olds voted in the 2004 presidential election compared to close to 50 percent of 18- to 24-year-olds in 1972 when the voting age was first lowered to 18. However, other surveys appear to indicate that civic engagement is growing and that the seeming decline in civic engagement might be explained by cohort differences in the type of volunteer work performed. For example, a recent 2006 survey by the UCLA Higher Education Research Institute, the nation's longest-running assessment of student attitudes and plans for college, suggests a growing trend toward increased civic responsibility. The survey found that about 66 percent of entering college freshmen believe it is essential or very important to help others who are in difficulty, the highest figure in 25 years. In addition, students were more likely to show commitment toward social and civic responsibility on several levels. During their high school senior year, many students volunteered, joined community action programs, kept up to date with political affairs, and participated in organized demonstration as well as political campaigns.

## Methodological Issues

Much of what we currently know about civic responsibility is through civic engagement which in turn, is through correlational studies and longitudinal survey data which are both limited in scope. Little in the way of longitudinal research has been carried out to assess the impact of a sense of civic responsibility. Research on civic responsibility has not fully assessed key process variables theoretically linked to the promotion or mediation of a sense of civic responsibility. Moreover, most program evaluations of community service which may promote civic responsibility were either incomplete in their assessment, conducted only at post-intervention, or lacked a matched control group. It is thus difficult to ascertain directionality and whether one can attribute associations, in the sense of civic responsibility, to community involvement or to individual and contextual factors.

Additionally, most research has not taken into account how ethnicity, socioeconomic status, and gender may moderate the relationship between community service and future civic engagement or lack thereof. More often than not, disadvantaged youth are left out of survey research and their sense of civic responsibility merits further study. For example, although the UCLA study provides much information about incoming freshmen, it is unable to provide information about young adults who do not attend college.

## Future Directions

At this point, it is known that certain conditions can promote civic responsibility. On an individual level, a sense of compassion and empathic concern and a desire to help others can foster civic engagement. On a social level, communities that have social capital, residential stability and a sense of community connectedness can promote a sense of civic responsibility. Future studies should examine what other individual and social factors might promote civic responsibility. Specifically, future research might take up the challenge of proposing and examining forms of civic engagement from which the disadvantaged can realistically participate and benefit. For example, community gardens, serving as “participatory landscapes,” appear to build social capital by promoting a sense of community through increased participation and involvement. Besides fostering a sense of civic responsibility, these social and physical environments might also promote community connectedness that could impact prosocial and helping behaviors as well as physical and psychological health.

Future studies also need to take into account sociodemographic characteristics and cohort differences of civic responsibility since characteristics such as age, race, gender and class differences may impact the choice of civic engagement. For example, the Baby Boomer generation favors political activism and community action, whereas the WWII generation favors more traditional forms of civic

engagement, through churches, hospitals and schools. People with high income but limited time might chose to donate money and resources as their form of civic engagement. On the other hand, African Americans may be more inclined towards church-based volunteering while women and the poor may be more likely to engage in being caregivers to friends and/or families and in neighboring relations, acts of care for neighbors outside the realm of organization or friendship. Although these activities have been previously ignored in the discussion of civic engagement, Herd and Meyer argue that these invisible activities nonetheless constitute a vital form of civic activity.

SEE ALSO: ► Collective well-being ► Compassion

## Civility

Theresa A. Thorkildsen<sup>a</sup> and Kurt M. Hanus<sup>b</sup>

<sup>a</sup>*University of Illinois at Chicago*; <sup>b</sup>*Michigan City High School*

The term *civility*, commonly thought of as polite conduct, is more often used in sociology, anthropology, and political science than in psychology, but a quick comparison of definitions reveals that psychologists have used different terms for the same idea. In other social sciences, civility is defined as a basic virtue or collection of virtues. As is noted in Rouner's edited book, civility forestalls unpleasantness in daily interactions, tames the potentially destructive individualism of society, and mediates tensions between government mandates and the norms operating in local neighborhoods. Civility requires the simultaneous recognition of the self and others as full members of a common humanity. Stephen Carter defined it as an attitude of respect, even love, for our fellow citizens that has both political and social ramifications.

Because civility hinges on the moral attitudes of respect, tolerance, and considerateness, psychologists have demonstrated how it invites a suspension of personal subjectivity for an empathic immersion into the subjectivity of others. In a pluralistic society, civility requires listening with an open mind to the beliefs and attitudes of others who may hold vastly different worldviews and come from different cultures. In civil discourse, individuals momentarily suspend their personal allegiances and endeavor to understand the experiences of others, even if this requires acts of restraint and deference to the moral fabric of the conversation. Put in psychological terms, civility is a community-building mood or impulse that acknowledges human interdependencies and desires to achieve common agendas.

## Civil Conduct

To understand individuals' community-building impulse, psychologists have explored the moral and conventional dimensions of civility. Turiel and his colleagues distinguished individuals' understanding of moral rules from social conventions,

personal preferences, and prudential rules of conduct. At a communal level, moral norms are defined as universal whereas social conventions are malleable customs that serve a specific purpose and may be temporary in nature. Personal preferences and prudential rules are more individualistic and help individuals sustain their identities or achieve self-enhancing ends.

Eisenberg and Fabes have emphasized the qualities of civil behavior by studying individuals' ability to act in accordance with their prosocial values. They note that researchers studying prosocial behavior look inward at how individuals regulate their emotions and thoughts to achieve particular ends. They also look outward at how members of society can teach individuals to improve this regulatory ability. Such studies offer a strong justification for the idea that empathy and sympathy are key psychological mechanisms necessary for civility.

Psychologists who study individuals' understanding and regulation of conduct focus primarily on the definition of civility as a form of manners, morals, and etiquette. They highlight individuals' ability to distinguish different forms of action and the reasons underlying such actions. There is an emphasis in this research on helping individuals acquire the social skills necessary for full participation in society.

## Civil Citizens

A third line of psychological inquiry focuses on individuals' understanding of societal institutions and the importance of civility to the management of such institutions and is consistent with Alexander's representation of the civil sphere. Alexander, a sociologist, defined the civil sphere as independent of state, economic, religious, family, and voluntary organizations. Institutions of the civil sphere are sustained by public opinion, cultural codes and specific social practices. They fulfill collective obligations while preserving personal autonomy in an attempt to facilitate civil discourse. Psychologists have looked in greater detail at the processes that foster citizenship and facilitate individual and collective action.

Much of the psychological work on civil citizens began after the Second World War and focuses on individuals' understanding of how civility interacts with justice to preserve feelings of citizenship in specific societal institutions. For example, Connell outlined how children and adolescents come to understand political responsibilities. Furth explored children's understanding of society and their future in such a world. Leahy explored developmental changes in individuals' understanding of social inequality and, more recently, Thorkildsen explored children's and adolescents' understanding of school as a civil institution. Virtues at the center of this work include the acceptance of obligation, duty, sacrifice, and generosity. Studies of civic involvement also include a host of sentiments that require at least some experience with personal and social subordination. This research is most often framed around social justice concerns but investigators typically consider participants' understanding of rights and obligations in nonpolitical institutions such as families, churches, and neighborhood organizations.

Psychologists who study individuals' understanding of civility and societal institutions seek to discover how people become productive citizens and understand their rights and responsibilities. Civility, in this work, is defined as a means of participating in civil discourse. Individuals' civil associations with a community are represented as distinct from their voluntary associations with local groups. Studies of civil associations involve the preservation of dignity for all members of society, but may not include the preservation of equality. In this respect, culture is distinguishable from civil society even though both concepts foster studies of how individuals endeavor to live in harmony with one another.

## **Studying Civility**

These distinctions between the different types of social knowledge and prosocial behavior have been articulated by social, developmental, and educational psychologists who use structured interviews and observational methods. Other branches of psychology explore particular segments of civility in greater detail by accepting a definition of civility without justifying their decisions. To understand voting behaviors or workplace etiquette, for example, Jost and Pearson, Andersson, and Wegner each started with specific assumptions about ideal forms of civility and evaluated individual differences in such actions. Explorations of civility in context have included a wide range of methods to instigate and observe opportunities for children, adolescents, and adults to exhibit civil behavior or participate in civil discourse.

A richer psychological representation of civility might be possible if psychologists were more willing to articulate the difference between the virtues of citizens and the virtues of individuals. Individuals at different points in the life-cycle or who face different forms of stress are unlikely to fully balance public and private concerns, but knowledge of this balance is essential to the understanding of civility. Civility, for example, may involve a network of privacies only some of which should be open to public scrutiny. Interpersonal relationships can begin with bonds of love and affection in local settings, expand to include the pursuit of private interests in public settings, and broaden further to include the clarification of public issues. The acknowledgement of such distinctions could lead to stronger theories about personal attachments and commitments to specific others; commitments to specific social institutions such as schools, neighborhood organizations, and churches; and knowledge of how federal and state governments affect the behaviors of citizens within and across different states. Although theories of civility may show some overlap with theories of justice, the moral dimensions of civility in a just society become clearer if we move beyond representations of civility as a collection of arbitrary etiquette rules that are contrasted with narrow definitions of morality.

SEE ALSO: ► Respect ► Virtues



## Clifton StrengthsFinder

Shane J. Lopez<sup>a</sup> and Candice A. Ackerman<sup>b</sup>

<sup>a</sup>*Clifton Strengths Institute and Gallup* <sup>b</sup>*University of Kansas*

Gallup's Clifton StrengthsFinder (and its recent revision, Clifton StrengthsFinder 2.0) is an online measure of personal talent that identifies areas where an individual's greatest potential for building strengths exist. The 180 item pairs (177 item pairs for the revised version) were based on the theory and research foundation associated with semi-structured personal interviews that had been used by Selection Research Incorporated and Gallup for over 30 years. The measure, developed through rational and empirical processes, has been repeatedly subjected to psychometric examination; a summary of reliability and validity evidence gathered to date is presented. The primary application of the Clifton StrengthsFinder, as the evaluation that initiates a strengths-based development process in work and academic settings, is discussed.

### Development of the Clifton StrengthsFinder

Donald Clifton based his research and practice related to success on one simple question, "What would happen if we studied what is right with people?", and on straightforward notions that stood the test of time and empirical scrutiny. First, he believed that talents could be operationalized, studied, and capitalized upon in work and academic settings. Specifically, *talent* was considered "naturally recurring patterns of thought, feeling, or behavior that can be productively applied" (Hodges & Clifton, 2004, p. 257) and manifested in life experiences characterized by yearnings, rapid learning, satisfactions, and timelessness. These trait-like "raw materials" are believed to be the products of normal healthy development and successful experiences over childhood and adolescence. *Strengths* are viewed as extensions of talent. More precisely, the strength construct combines talent with associated knowledge and skills and is defined as the ability to provide consistent, near-perfect performance in a specific task.

Second, Clifton considered success to be closely associated with personal talents and strengths in addition to the traditional constructs linked with analytical intelligence. In accordance with those beliefs, he worked to identify hundreds of personal talents that predicted work and academic success, and he constructed empirically-based, semi-structured interviews for identifying these talents. When developing these interviews, Clifton and analysts examined the prescribed roles of a person (e.g., student, salesperson, administrator), visited the job site or academic setting, identified outstanding performers in these roles and settings, and determined the long-standing thoughts, feelings, and behaviors associated with situational success. Many of the interviews developed provided useful predictions of positive outcomes. These interviews subsequently were

administered by Gallup analysts to more than two million individuals for the purposes of personal development and employee selection. In the mid-1990s, when considering the creation of an objective measure of talent, Clifton and colleagues systematically reviewed these interviews and the data they generated to capitalize on the accumulated knowledge and experience of Gallup's talent-based practice.

The prominence of dimensions and items relating to motivation and to values in much of the interview research informed the design of a Clifton StrengthsFinder instrument that can identify those enduring human qualities. An initial pool of more than 5,000 items was constructed on the basis of traditional validity evidence (construct, content, criterion). Given the breadth of talent assessed, the pool of items was considered large and diverse. A smaller pool was derived subsequent to quantitative review of item functioning and a content review of the representativeness of themes and items within themes (with an eye toward the construct validity of the entire assessment). Specifically, evidence used to evaluate the item pairs was taken from a database of criterion-related validity studies, including over 100 predictive validity studies. Factor and reliability analyses were conducted in multiple samples to assess the contribution of items to measurement of themes and the consistency and stability of theme scores – thereby achieving the goal of a balance between maximized theme information and efficiency in instrument length. During development phases, a number of sets of items were pilot tested. The items with the strongest psychometric properties (including item correlation to theme) were retained. In a follow-up study of 601,049 respondents, the average item-to-proposed-theme correlation (corrected for part-whole overlap) was 6.6 times larger than the average item correlation to other themes (see the validity section of this manuscript for presentation of average item correlations for each theme).

In 1999, a 35-theme version of the Clifton StrengthsFinder was launched. After several months of data were collected, researchers revisited the instrument and, based on analyses of theme uniqueness and redundancy, decided on the 180 item pairs (360 items, 256 of which are scored) and the 34-theme version that currently is available. Since 1999, some theme names have changed, but the theme descriptions and most of the item pairs have not changed (the Clifton StrengthsFinder 2.0, containing 177 item pairs, was released in 2007).

Today, the Clifton StrengthsFinder is available in 24 languages and modifiable for individuals with disabilities. It is appropriate for administration to adolescents and adults with a reading level of 10th grade or higher. By identifying one's top themes of talent, it provides a starting point in the identification of specific personal talents. It is not designed or validated for use in employee selection or mental health screening. Given that Clifton StrengthsFinder feedback is provided to foster intrapersonal development, comparisons across profiles of individuals are discouraged. Furthermore, the Clifton StrengthsFinder is not sensitive to change; it should not be used a pre-post measure of growth.

## Administration, Scoring, and Feedback

Through a secure Internet connection, the Clifton StrengthsFinder presents a demographic questionnaire (tapping country of residence, age, and gender) and the item pairs in the preferred language of the user. Each item lists a pair of potential self-descriptors, such as “I read instructions carefully” and “I like to jump right into things.” The descriptors are placed as if anchoring polar ends of a continuum. From each pair, the participant is then asked to choose the descriptor that best describes him or her, and also the extent to which it does so.

Scores are calculated based on the mean of the intensity of self-description. A proprietary formula assigns a value to each response category. Values for items in the theme are averaged to derive a theme score. Scores are presented as a mean, a standard score, and a percentile and added to the Gallup database. Feedback varies in accordance with the reason the person completes the Clifton StrengthsFinder. In most cases the respondent receives only a report listing his or her top five talent themes – those in which the person received his or her highest scores, in order of intensity – also known as Signature Themes. In other situations the respondent may review all 34 themes, along with “action items” for each theme, in a personal feedback session with a Gallup consultant or in a supervised team-building session with their colleagues. In programs designed to promote strengths-based development (described subsequently), feedback often is accompanied by instruction, experiential learning, and mentoring activities designed to help people make the most of their talents (i.e., develop strengths associated with occupational or educational roles).

## Reliability

The number of items per talent theme ranges from four (Context, Ideation, Incliner, Input, Strategic) to 15 (Positivity). Internal consistency, as reflected in coefficient alphas based on responses of 706 Gallup associates, meets expectations for measures used in psychology practice (*coefficient alpha* = .70). The alpha for the vast majority of the themes (23 of them) is at or above .70, whereas only three themes have alphas below .65. The highest alpha (.81) is associated with the Woo theme and the lowest alpha (.55) is associated with the Restorative theme.

Almost all Clifton StrengthsFinder themes have test-retest reliability between .60 and .80 over a six-month interval. An initial study of stability (examining score to score associations) was conducted in the 1990s and the 3-week test-retest of 300 consumer interviewers from Gallup provided an average theme correlation coefficient of .76. A June 2000 study revealed that the average correlation of an individual's theme ranking across multiple time periods is .74.

The average item-total correlations and theme-score intercorrelations were examined for the entire Clifton StrengthsFinder database, as well as for subsamples

stratified by cultural indicators, age, and gender. Overall, the results suggest that items relate to their respective themes in a consistently positive manner. In addition, the analysis of the average item-cross total correlations suggests, as expected, that items have a higher positive relationship with their assigned themes than with other themes. The examination of the theme-score intercorrelations suggests the absence of complete redundancy among themes. This lends support to the notion that each of the 34 themes provides unique information for evaluation purposes.

## **Validity**

Evidence provided by Gallup researchers suggests that the structure of talent measured by the Clifton StrengthsFinder does not vary across cultures and demographic variables. Furthermore, the average item-to-theme correlation is quite similar across countries.

Finally, a study correlating Clifton StrengthsFinder themes with the Big Five constructs provided initial evidence for the measure's convergent and discriminant validity. That is, the Clifton StrengthsFinder and personality variables were not redundant and were generally associated as hypothesized.

## **Application**

The Clifton StrengthsFinder identifies the areas where the greatest potential for strength development exists, and the measure often is used as a starting point for self-discovery in Gallup strengths-based development programs. After a respondent has completed the assessment and talent feedback is provided, a group of developmental suggestions is customized to the individual's Signature Themes and to his or her role to help him or her integrate talents into personalized views of self. As the identification and integration stages of strengths development unfold, behavioral change is encouraged. Specifically, the strengths-based development process encourages individuals to build strengths by acquiring skills (i.e., basic abilities) and knowledge (i.e., what you know, including facts and meaning-making from experiences) that can complement their greatest talents in strong – consistent and near-perfect – application to specific tasks.

Successful strengths-based development results in desired behavioral change. Indeed, Gallup reports that client-sponsored studies have provided evidence that strengths-based development relates to various positive outcomes, including increases in employee engagement and productivity. Furthermore, managers who create environments in which employees are able to make the most of their talents have more productive work units with less employee turnover. Studies also show that strengths-based development increases self-confidence, direction, hope, and altruism in college students. Ongoing research continues to explore the benefits

of strengths-based development on desired outcomes in both work and academic settings.

Since 1998, the Clifton StrengthsFinder has been used as Gallup's talent identification tool in development programs with various academic institutions, faith-based organizations, major businesses, and other organizations. For these purposes, the measure has adequate internal consistency, stability, validity, and cross-cultural applicability. Gallup researchers plan to continue to examine the psychometric properties of the measure and modify it based on research findings.

The measure has been used to facilitate the development of individuals across dozens of roles including: student, teacher, manager, customer service representative, salesperson, administrative assistant, nurse, lawyer, pastor, leader, and school administrator. Strengths-based development programs, grounded in traditional Gallup practices, are now being refined based on the principles of positive psychology, the scientific study of and evidence-based promotion of optimal human functioning.

SEE ALSO: ► Clifton, Donald O. ► Clifton Youth StrengthsExplorer  
► Gallup ► Stone, Phil ► Strengths (Gallup)

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## Clifton Youth StrengthsExplorer

Shane J. Lopez<sup>a</sup> and Rhea L. Owens<sup>b</sup>

<sup>a</sup>Clifton Strengths Institute and Gallup <sup>b</sup>University of Kansas

The Clifton Youth StrengthsExplorer is a talent identification tool designed for use at home, in various academic institutions, and in other organizations dedicated to making the lives of young people better. For these purposes, the measure has adequate internal consistency, stability, and validity.

Gallup developed numerous semi-structured interviews to identify the talent of youth and adults that could be enhanced and used to pursue positive outcomes in work and school. Under the leadership of educational psychologist Donald Clifton, Gallup made strengths measurement more accessible with the development of the Clifton StrengthsFinder, a brief, objective online measure of personal talent. Gallup's success with web-based assessment coupled with 30 years of experience with the Youth Perceiver (a structured interview consisting of 81 open-ended questions), led to the development of the Clifton Youth StrengthsExplorer. The

new measure and the supporting educational materials are appropriate for 10- to 14-year-olds.

## Development of the Clifton Youth StrengthsExplorer

Donald Clifton based his research and practice related to success on one simple question, “What would happen if we studied what is right with people?” He believed that talents could be operationalized, studied, and capitalized upon in academic and work settings. Specifically, *talent* was considered “naturally recurring patterns of thought, feeling, or behavior that can be productively applied” (Hodges & Clifton, 2004, p. 257) and manifested in life experiences characterized by yearnings, rapid learning, satisfactions, and timelessness. These trait-like “raw materials” are believed to be the products of normal healthy development and successful experiences over childhood and adolescence. *Strengths* are viewed as extensions of talent. More precisely, the strength construct combines talent with associated knowledge and skills and is defined as the ability to provide consistent, near-perfect performance in a specific task. Clifton considered success to be closely associated with personal talents and strengths in addition to the traditional constructs linked with analytical intelligence. He worked to identify hundreds of personal talents that predicted academic and work success, and he constructed empirically-based, structured interviews for identifying these talents. When developing these interviews, Clifton and analysts examined the prescribed roles of a person, visited a personal setting, identified outstanding performers in these roles and settings, and determined the long-standing thoughts, feelings, and behaviors associated with situational success. These interviews were administered by Gallup analysts to thousands of individuals for the purposes of personal development and employee selection.

In the mid-1990s, when considering the creation of objective measures of talent, Clifton and colleagues systematically reviewed these interviews and the data they generated. The results included the development of the Clifton StrengthsFinder and the early work on the Clifton Youth StrengthsExplorer. After Clifton passed away in 2003, his efforts to develop an online assessment tool for youth were continued by a team of Gallup researchers and strengths experts in an attempt to realize multiple benefits. The aim was to go beyond the deficit model of youth development (i.e., focusing on what children and youth are bad at and attempting to remedy those deficiencies) and create a more holistic picture of the individual. An additional goal was to learn about children’s strengths to better equip parents, educators, and the youth themselves to find out which activities or endeavors might bring the most success. Further, to give youth positive labels and experiences of success to encourage later successes, as well as improved self-esteem and confidence was another objective.

As part of a multi-phased approach to strengths identification and instrument development, qualitative and quantitative research was conducted. Initial qualitative

research involved four focus groups, three with parents of children ranging in ages from 5 to 17 years and with teachers of grades 5 to 12. The questions posed by the moderator were created by Gallup and were conversationally presented through the course of each focus group. The moderator asked the participants to describe their children in terms of their personal characteristics and how they behave in a variety of situations.

The content of each of the 90-minute focus groups was transcribed and analyzed with two objectives. The first goal was to examine the range of characteristics that were used in describing children; a list of 67 terms was generated. The second goal of analysis was the identification of the themes that served to consolidate the range of descriptions; 23 themes appeared to capture the data.

A set of themes to be examined in quantitative pilot studies were identified and item pools for each theme were constructed. The 290 items were reviewed by a panel of experts. In Pilot 1, 47 youths completed the 290 items with a 3-point response scale (1-Yes!; 2-Sometimes; 3-No!), and 58 youths completed the items with a 4-point scale (1-Almost Always or Always; 2-Often; 3-Sometimes; 4-Almost Never or Never); it was determined that the 4-point scale was most appropriate. Data gathered from Pilot 1 were used to evaluate the psychometric properties of each item and the instrument as a whole. Specifically, researchers studied item means, standard deviations, correlations to hypothesized theme, and frequency of nonresponse and this analysis resulted in the reduction of the number of themes (from 23 to 18) and items (290 to 154).

In Pilot 2, 535 students from geographically, ethnically, and socioeconomically diverse school districts in the country completed a version of the youth strengths measure that consisted of the 154 items believed to measure talent in 18 themes. Factor analysis and examination of item characteristics resulted in a 78-item instrument measuring ten themes, which were labeled in a manner that reflects the general content of the items and is meaningful to youth and adults. Specifically, the Clifton Youth StrengthsExplorer measures talent in youths with the following talent themes:

- Achieving: accomplish things and have a great deal of energy.
- Caring: help others.
- Competing: measure performance against others and have a great desire to win.
- Confidence: believe in themselves and their ability to be successful in their endeavors.
- Dependability: keep their promises and show a high level of responsibility.
- Discoverer: very curious and like to ask “Why?” and “How?”.
- Future Thinker: think about what’s possible beyond the present time, even beyond their lifetime.
- Organizer: good at scheduling, planning and organizing.
- Presence: likes to tell stories and be the center of attention.
- Relating: good at establishing meaningful friendships and maintaining them.

## Administration, Scoring, and Feedback

Assessment takers receive a unique numeric code that provides access to the Clifton Youth StrengthsExplorer. The assessment consists of 78 items which respondents indicate, on the four-point Likert scale (1-Almost Always or Always; 2-Often; 3-Sometimes; 4-Almost Never or Never), the degree to which they feel the statements apply to them. An additional option allows respondents to indicate that they do not know the meaning of the statements by selecting “*This item does not make sense to me.*” In nearly all administrations, the respondent receives a “Top 3” report and supporting materials. However, if more than 30% of the questions are not understood by the participant, he or she receives a message that his or her report cannot be created at that time and he or she should seek help from an adult. No time out is applied to this assessment. However, a response to each question has to be indicated before the respondent is allowed to continue to the next question.

The Clifton Youth StrengthsExplorer uses individual responses to measure talent in ten themes, then rank orders the themes via a proprietary formula. Immediately after the assessment is completed, respondents receive their Top 3 report of their talent themes and brief descriptions. Youths can then access more detailed descriptions of their top talent themes as well as “action items.” The access code also provides access to the educational components of the StrengthsExplorer package, the Youth Workbook and Parent Guide, which provide activities that can be used to further explore, understand, and build the youths’ greatest talents.

## Reliability

The number of items per talent theme ranges from 6 (Dependability) to 10 (Audience). Internal consistency meets expectations for measures used in psychological practice (*coefficient alpha* = .70). The alpha for half of the themes is .80 or above. The highest alpha (.87) and the lowest alpha (.74) are associated with the Caring theme and the Organizer theme, respectively. Internal consistency for each theme also is evident when data are disaggregated across age and ethnicity.

A total of 56 eighth-grade students at Westside Middle School in Omaha, Nebraska participated in the Clifton Youth StrengthsExplorer test-retest study. Of the 56 students 34 (61% overall completion rate) were able to complete both the test and retest versions across a 5- to 7-week interval. Most of the Clifton Youth StrengthsExplorer themes have stability of .60 or above. The least stable of the themes were Competition (.44) and Discoverer (.49).

The stability of the Top 3 report for these 34 students also was considered. Given that changes in responses to a few items could change the order of the themes,



it was hypothesized that two of the same top three would be listed on score reports from both administrations. Of the respondents 65% had at least two themes in the Top 3 set from the first administration appear in the Top 3 set from the second administration.

The Top 1 theme at the first testing was Relating (32%) and the most frequent Top 1 theme at retest was Competition (35%). The most frequent theme appearing in the Top 3 set at the first testing was Competition (59%) and the most frequent theme appearing in the Top 3 set at retest was Relating (59%).

Internal consistency and stability estimates were computed to examine the basic reliability of the Clifton Youth StrengthsExplorer. The evidence suggests that the scales or themes are internally consistent and stable over a 5- to 7-week period. Specifically, coefficient alphas range from .72 to .87 and most test-retest correlations were above .60 over a 5- to 7-week interval.

## Validity

In addition to studying the intercorrelations among the items in the assessment, and correlating each item to its respective theme, factor analyses were used during the final iterations of quantitative instrument development, as a guide, to reduce the redundancy of items in each theme and to maximize the independence of the measured constructs. From this, nine factors were identified. The first factor was interpreted as the *caring* theme and the second factor as the *competing* theme. The third factor was interpreted to contain items from both the *dependability* and *confidence* themes. Due to their conceptual uniqueness and independence, researchers maintained them as separate themes. The fourth factor was interpreted to contain items from the *relating* theme, the fifth factor, *discoverer*, the sixth factor, *achieving*, the seventh factor, *organizer*, the eighth factor *presence*, and the ninth factor, *future thinker*.

## Applications

The Clifton Youth StrengthsExplorer helps youth ages 10 to 14 understand and apply the results of their talent assessment and provide parent and instructor manuals that present additional activities to assist youth in further building upon their talents. The goals of StrengthsExplorer include: helping youth identify their positive characteristics and improve their understanding of self; stimulating youth development in their areas of greatest talent; improving parents'/instructors' understanding of their children/students; providing the theme-based language that youths and parents/instructors could use to discover and describe positive characteristics; and creating an opportunity for an important kind of communication between parents and their children.

## Future Directions

Gallup researchers plan to continue to examine the psychometric properties of the measure, specifically concurrent validity and cross-cultural applicability, and modify it based on research findings. StrengthsExplorer programming, grounded in traditional Gallup practices, will be refined based on the principles of positive psychology, the scientific study of and evidence-based promotion of optimal human functioning. The productive collaboration between Gallup and positive psychology hopefully will lead to refined and new measures and programs that will continue to generate more answers to the question, “What would happen if we studied what is right with people?”

SEE ALSO: ► Clifton, Donald O. ► Clifton StrengthsFinder ► Positive youth development ► Strengths (Gallup)

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## Clifton, Donald O.

Timothy D. Hodges  
*Gallup*

“What would happen if we studied what is right with people?” This simple question guided the life’s work of Donald O. Clifton [1924–2003]. While most psychologists in the 1950s were focused on the study of deficits and illness, Clifton, a graduate student in educational psychology at the University of Nebraska-Lincoln, was studying what made some counselors more effective than others. Clifton built on the lessons learned in this research to later help hundreds of organizations select and develop more employees like their top performers. An educator, thought leader, inventor, and entrepreneur, Clifton is remembered for his extraordinary ability to bring out the best in people and help individuals and organizations achieve outstanding results.

Born on February 5, 1924, in Butte, Nebraska, Clifton was awarded a Distinguished Flying Cross for his service as a navigator in World War II. He graduated with a baccalaureate degree in mathematics from the University of Nebraska-Lincoln in 1949, and a doctorate in educational psychology from the same institution in 1953. Clifton served on the University of Nebraska-Lincoln faculty for 19 years. He continued his research on successful individuals at Selection Research,

Inc., the human resources consulting company he founded in 1969. In 1988, Selection Research, Inc. acquired Gallup, the public opinion polling organization. Clifton served as board chairman of Gallup from 1988 to 1999, leading the organization through an impressive period of growth.

Clifton led a group of Gallup researchers to innovative discoveries and applications on many topics including employee selection, development, employee engagement, management and leadership. By studying top performers in the workplace, Clifton and his team of researchers developed hundreds of structured interviews to select high potential employees with talent suited for their role. The study of success across multiple roles also led to the development of the Clifton StrengthsFinder, Gallup's online assessment that has helped millions of people around the world discover their talents and develop their strengths. Clifton and his research team also developed Gallup's Q<sup>12</sup>, an assessment designed to measure employee engagement through a simple set of actionable items. Gallup University, one of the world's leading providers of management and leadership education, applies Clifton's theories to improve workplaces around the world.

A prolific author, Clifton's thought leadership is captured in hundreds of scholarly articles, technical reports, and books. His 1992 book with Paula Nelson, *Soar with Your Strengths*, introduced the concept of strengths-based development. Now, *Discover Your Strengths: How to Develop Your Talents and Those of the People You Manage*, written in 2001 with Marcus Buckingham, has been read by millions of managers and employees around the world. *StrengthsQuest: Discover and Develop Your Strengths in Academics, Career, and Beyond*, first released in 2002 with Edward "Chip" Anderson, has taken the science of strengths development to hundreds of global college and university campuses. New York Times no. 1 Bestseller *How Full is your Bucket? Positive Strategies for Work and Life*, published in 2004 with grandson Tom Rath, draws on positive psychology research and outlines a simple metaphor of a dipper and a bucket to reveal how even the briefest interactions affect relationships, productivity, health, and well-being. For his outstanding contributions to the science of positive psychology, in 2002 Clifton was cited as the Father of Strengths-Based Psychology and the Grandfather of Positive Psychology in an American Psychological Association Presidential Commendation.

SEE ALSO: ► Clifton StrengthsFinder ► Clifton Youth StrengthsExplorer  
► Employee engagement ► Gallup ► Strengths (Gallup)

## Clinical Psychology

James E. Maddux  
*George Mason University*

The Society of Clinical Psychology, a division of the American Psychological Association, offers this definition of *clinical psychology* on its website:

The field of Clinical Psychology integrates science, theory, and practice to understand, predict, and alleviate maladjustment, disability, and discomfort as well as to promote human adaptation, adjustment, and personal development [and] focuses on the intellectual, emotional, biological, psychological, social, and behavioral aspects of human functioning across the life span, in varying cultures, and at all socio-economic levels.

This definition and others emphasize the alleviation of “maladjustment, disability, and discomfort” but also mention the promotion of adjustment and personal development. For most of its history, however, clinical psychologists have been much more concerned with the former than with the latter. They have been much more concerned with abnormal and maladaptive psychological phenomena and processes – *mental disorders*, *psychological disorders*, or *psychopathology* – than with positive adjustment and positive well-being.

This focus on the pathological can be viewed as a kind of ideology – an *illness ideology*. Although the *illness metaphor* (also referred to as the *medical model*) prescribes a certain *way of thinking* about psychological problems (e.g., a psychological problem is *like* a biological disease), the *illness ideology* goes beyond this and tells the clinical psychologist *what to think about* – to what aspects of human behavior the clinical psychologist should pay attention. Specifically, it dictates that the focus of attention should be disorder, dysfunction, and disease rather than health. Thus, it narrows the focus on what is weak and defective about people to the exclusion of what is strong and healthy. It emphasizes abnormality over normality, poor adjustment over healthy adjustment and sickness over health. It promotes dichotomies between normal and abnormal behaviors, between clinical and non-clinical problems, and between clinical and nonclinical populations. It locates human adjustment and maladjustment inside the person rather than in the person’s interactions with the environment and encounters with social and cultural values and societal institutions. Finally, this ideology and its language portray people who seek help as passive victims of intra-psychic and biological forces beyond their direct control who must be the passive recipient of an expert’s care.

This illness ideology is embedded in the very name of the discipline. *Clinical* derives from the Greek *klinike*, meaning “medical practice at the sickbed,” and *psychology* derives from *psyche*, meaning “soul” or “mind.” Evidence for this ideology also can be found in the language used by the vast majority of clinical psychologists to describe their work and the people with whom they work. Terms such as *symptom*, *disorder*, *pathology*, *illness*, *diagnosis*, *treatment*, *doctor*, *patient*, *clinic*, *clinical*, and *clinician* are all consistent with an ideology of illness and disease.

Clinical psychology was not steeped in the illness ideology at its beginning. Some historians of psychology trace the beginning of the profession of clinical psychology in the United States back to the 1886 founding of the first psychological clinic in the United States at the University of Pennsylvania by Lightner Witmer. Witmer and the other early clinical psychologists worked primarily with children who had learning or school problems – not with patients who had mental disorders.

Thus, they were more influenced by psychometric theory and its emphasis on careful measurement than by psychoanalytic theory and its emphasis on psychopathology and illness, which was rapidly growing in popularity in Europe but had not, at that time, had much influence in North America. Following Freud's 1909 visit to Clark University, however, psychoanalysis and its pathology-focused derivatives soon came to dominate both psychiatry and clinical psychology. Psychoanalytic theory, with its emphasis on hidden intra-psychic processes and pathological sexual and aggressive urges, provided a fertile soil for the growth of the illness ideology.

Several other factors encouraged clinical psychologists to devote their attention to psychopathology and thereby strengthened the hold of the illness ideology over the field. First, although clinical psychologists were trained academically in universities, their practitioner training occurred primarily in psychiatric hospitals and clinics. In these settings, clinical psychologists worked primarily as psycho-diagnosticians under the direction of psychiatrists trained in medicine and psychoanalysis. Second, after World War II, the United States Veterans Administration was founded and soon joined the American Psychological Association in developing training centers for clinical psychologists. Because these training centers were in Veterans Administration hospitals, the training of clinical psychologists continued to occur primarily in psychiatric settings, which were steeped in both biological models and psychoanalytic models – approaches both concerned with illness and pathology. Third, the United States National Institute of Mental Health (NIMH) was founded in 1947. Despite its name, the NIMH was concerned primarily with mental illness, not mental health. As a result, large sums of money became available for the study of psychopathology and “thousands of psychologists found out that they could make a living treating mental illness” (Seligman & Csikszentmihalyi, 2000, p. 6). By the 1950s, the practice of clinical psychology in the United States was grounded firmly in four basic assumptions consistent with the illness ideology.

First, clinical psychology is concerned with psychopathology – deviant, abnormal, and maladaptive behavioral and emotional conditions. Thus, the focus is not be on facilitating mental health but on alleviating mental illness; not on the everyday problems in living experienced by millions, but on severe conditions experienced by a relatively small number of people.

Second, psychopathology, clinical problems, and clinical populations differ in kind, not just in degree, from normal problems in living, nonclinical problems, and nonclinical populations. Psychopathologies are distinct mental disorders, not merely extreme variants of common problems in living and expected human difficulties, flaws, and imperfections. For this reason, understanding psychopathology requires theories different from those theories that explain normal problems in living and effective psychological functioning.

Third, psychological disorders are distinct conditions or illnesses *inside* the individual that cause people to think feel, and behave maladaptively. The causes of emotional and behavioral problems are found inside the person rather than in

the person's interactions with his or her environment (including other people and society). Thus, to understand psychological problems, it is more important to understand and measure the fixed properties of people (e.g., personality traits) or their hidden intra-psychic conflicts than to understand and assess the complex interactions between the person and his or her life situations.

Fourth, the psychological clinician's task is to identify (diagnose) the disorder (disease) inside the person (patient) and to prescribe an intervention (treatment) for eliminating (curing) the internal disorder (disease) responsible for the symptoms. Even if the attempt to alleviate the problem is purely verbal, it is still referred to as treatment or therapy, unlike often equally successful attempts to educate or persuade on the part of teachers, ministers, friends, and family. In addition, these interactions between clinicians and their patients differ in kind from helpful and distress-reducing interactions between the patient and other people in his or her life and understanding them requires special theories.

The basic assumptions of the illness ideology continue as implicit guides to clinical psychologists' activities, and they permeate the view of clinical psychology held by the public and policy makers. In fact, the influence of the illness ideology probably has grown since the mid-20th century as a result of the growing influence of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM). The influence of the first two editions (1952 and 1968) on research, practice, and clinical training was negligible, but this influence increased greatly after the publication of the revised expanded 3rd edition in 1980. The DSM now provides the organizational structure for almost all textbooks and courses on abnormal psychology and psychopathology, as well as almost all books on the assessment and treatment of psychological problems for practicing clinical psychologists. The growth in the role of third-party funding for mental health services in the United States during this same period fueled the growth of the influence of the DSM as these third-parties began requiring a DSM diagnostic label as a condition for payment or reimbursement for mental health services. Nowhere is the power of the illness ideology over clinical psychology in most of the developed world more evident than in the dominance of the DSM.

## Positive Clinical Psychology

The illness ideology is inconsistent with a positive psychology that emphasizes goals, well-being, satisfaction, happiness, interpersonal skills, perseverance, talent, wisdom, and personal responsibility; that is concerned with understanding what makes life worth living; that aims to help people become more self-organizing and self-directed; and that recognizes that "people and experiences are embedded in a social context" (Seligman & Csikszentmihalyi, 2000, p. 8).

Therefore, it is time for clinical psychology to abandon the illness ideology and replace it with a *positive clinical psychology* grounded in positive psychology's ideology of health, happiness, and human strengths. A positive clinical psychology rejects:

(a) the categorizing of humans and human experiences; (b) the increasingly common pathologizing of humans and human experience; (c) the idea that so-called mental illness and mental health exist inside of people rather than in the relationships between people and their social, community, and cultural environments; and (d) the assumption that understanding what is worst and weakest about people is more important than understanding what is best and bravest.

Along with a new ideology, clinical psychologists must adopt a new language for talking about their work and the people with whom they work. In this new language, ineffective patterns of behaviors, cognitions, and emotions are viewed not as illnesses, diseases, or disorders but as *problems in living*. These problems in living are viewed not as located inside of the person but in the *interactions* between the person and other people, the community, and the larger culture. Those who seek assistance in enhancing the quality of their lives are not patients but *clients* or *students*. The professionals who specialize in facilitating psychological health are not doctors or clinicians but teachers, counselors, consultants, coaches, or even social activists. Strategies and techniques for enhancing the quality of lives are not medical treatments but educational, relational, social, and political *programs* or *interventions*. Finally, the facilities to which people will go for assistance with problems in living are not clinics and hospitals but *centers*, *schools*, or even *resorts*. Such assistance might even take place in community centers, public and private schools, churches, and people's homes rather than in specialized clinical facilities.

A positive clinical psychology offers an expanded view of what is important about human behavior and what is necessary to understand human behavior and to enhance people's quality of life. A positive clinical psychology gives at least as much emphasis to mental health as to mental illness and at least as much emphasis to identifying and understanding human strengths and assets as to identifying and understanding human weaknesses and deficiencies. It is as much concerned with understanding and enhancing well-being and effective functioning as it is with alleviating distress and maladaptive functioning. It is concerned not just with alleviating or preventing (as indicated by the DSM's definition of mental disorder) "suffering, death, pain, disability, or an important loss of freedom" (APA, 2000, p. xxxi), but also with promoting health, happiness, physical fitness, pleasure, and personal fulfillment through the free pursuit of chosen and valued goals.

Positive psychological assessments and clinical interventions do not differ from those grounded in the illness ideology as much in *how* change is accomplished as in *what* becomes the target of change – in the domains of psychological functioning that become the focus of assessment and in the kinds of changes that interventions are designed to facilitate. Positive psychological assessment emphasizes the evaluations of people's strengths and assets along with their weaknesses and deficiencies. Positive psychological interventions emphasize the enhancement of people's strengths and assets in addition to, and at times instead of, the amelioration of their weaknesses and deficiencies, secure in the belief that strengthening the strengths will weaken the weaknesses. All of this requires a major change for

clinical psychology not in its scientific methods or its clinical techniques but is in its vision and mission, which must begin with a change in ideology.

SEE ALSO: ► Abnormal psychology ► American Psychological Association  
► Counseling psychology ► Developmental psychopathology ► Diagnostic and Statistical Manual

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## Close Relationships

Amy Strachman

*University of California, Los Angeles*

There is only one happiness in life, to love and be loved. George Sand (pen name of Amandine Dupin), French novelist, 1804–76

A review of positive psychology would not be complete without noting the importance of close relationships. Close, interpersonal relationships can be a powerful source of love, happiness, and overall life satisfaction. Indeed, without relationships, people suffer not only emotionally, but physically as well. While situational factors also play a role, many of our thoughts and feelings are focused on continuing these social bonds. The current entry summarizes some of the theories and research associated with developing and maintaining healthy relationships.

## Love

Men and women consider love a necessary component for marriage. However, what is love? A pioneer in love research, Zick Rubin, developed a scale which distinguished *liking* from *love*. The scale distinguishes between the emotional attachment one feels with love and the positive appraisal one feels with liking. More than a decade later, researchers suggested that this feeling of love can also take many forms. Sternberg proposed that three different building blocks of relationships



combine to form different types of love. First, there is intimacy, which includes feelings of understanding, communication, and support. Second, there is passion, which comprises physical arousal, desire, and sexual needs. Finally, there is commitment, which is the decision to devote oneself to a relationship. Each of these components can vary from low to high, developing the different forms of love.

One common distinction made by researchers is between *passionate love* (also called *romantic love*) and *companionate love*. Companionate love occurs when intimacy and commitment are high and passion is low, and romantic/passionate love occurs when intimacy and passion are high and commitment is low. In the beginning of a relationship, partners are absorbed in each other, with frequent ups and downs, and this is indicative of passionate love. As the relationship progresses, however, lives become intertwined and shared, and thus the love turns to companionate as passion and sexual desire decreases. While this is one scenario, it is also possible for the two loves to coexist, or a relationship including passion but not intimacy and vice versa. In short, research has shown that love is an emotion including passion and companionship, and the ideal relationship would include both.

## Attachment Theory

A pervasive and important perspective on relationships is attachment theory. The father of this theory, John Bowlby, proposed that attachment with others enhances survival by regulating an infant's relationship and proximity to the caregiver. The child continuously monitors the caregiver and will play contentedly as long as she is around. However, if the caregiver leaves, the child will become upset and will focus on re-establishing closeness to the caregiver. Through seeking out their caregiver, some children found responsive care and protection to be reliably available, some found responses that were unpredictable and inconsistent, and some found reluctant and rejecting responses from their caregivers. As a result, attachment bonds that are *secure*, *anxious-ambivalent*, and *avoidant* are formed and carried with them through adulthood.

Hazan and Shaver found these same three categories of attachment styles in romantic relationships. Secure people are comfortable with emotional intimacy and readily turn to their partners for comfort and support; anxious-ambivalent people are constantly seeking intimacy and reassurance and worry about abandonment; and avoidant people dislike dependency and closeness and have trouble trusting their partners. These attachment styles have also been found to influence positive and negative relationship factors. For example, people with secure attachment tend to be more trusting, committed, and satisfied in their relationships, and overall, have more happy and stable romantic relationships. Fortunately, for the approximately 40% that are not securely attached, people can change their attachment style with new experiences, and anxious-ambivalent styles are the most likely to change.

## Interdependence Theory and the Investment Model

What makes one person stay in an unhappy relationship, while another person leaves a happy relationship? One of the most influential theories of relationship research is interdependence theory, also known as social exchange theory. This theory offers an economic perspective of relationship satisfaction and commitment. Kelley and Thibaut suggested that the outcomes of social relationships can be broken down into the rewards a person receives and the costs that one incurs. Rewards are the positive experiences that create feelings of enjoyment and happiness, while costs are the negative experiences that yield emotional or physical discomfort or pain. When examined in conjunction, one can achieve an overall assessment of the outcome called *goodness of outcome*.

Kelley and Thibaut suggested that relationships continue only if the experiences with that person meet the *standards of acceptability* for both partners. The first standard for evaluation is the comparison level (CL) and is used to evaluate the “attractiveness” of the relationship. The rewards and costs (jointly) in the relationship are compared to what one feels he/she “deserves,” which is based on previous relationships and experiences. In other words, the present situation is compared to the CL, and this is how one determines if a relationship is satisfactory or not. Outcomes above the CL are “satisfying” whereas outcomes below the CL are “unsatisfying.” The second standard of acceptability is the comparison level for alternatives (CLalt). The CLalt is the lowest level of outcomes that is acceptable to a person when taking all available alternatives into account. Therefore, the CLalt depends on the quality of the alternatives, and these can be anything from another relationship to being alone. If one believes that his/her current relationship is better than any other alternative, then he/she is *dependent* on the relationship. Interdependence Theory describes an evaluation of the environment in terms of rewards and costs, but it is the comparison with alternatives that influences the decision to stay in the relationship. The balance of rewards and costs affects the level of satisfaction, but if that is still higher than the best alternative, the decision is to stay because of the dependence on the relationship. Therefore, it is possible to have an unsatisfying but stable relationship.

Building on interdependence theory, Rusbult and colleagues developed the investment model. This model distinguishes between two characteristics of relationships: *satisfaction*, or the positivity of affect and attraction to one’s relationship, and *commitment*, or the desire to maintain a relationship and to feel psychologically attached to it. Satisfaction in a relationship is achieved when the relationship provides high rewards, low costs, and exceeds expectations (i.e., CL). Commitment is influenced by the quality of alternatives, investment size, and satisfaction. Alternatives are similar to the CLalt from interdependence theory; however, investment is an added component built into the investment model. Furthermore, commitment is influenced by all three of these components:

commitment is high when satisfaction and investments are high, and alternatives are low.

## Positive Perceptions

The evaluation of these rewards and costs might be colored by “rosy glasses.” People often judge their partners in a positive light, called *positive illusions*. These judgments consider faults as less significant and emphasize a partner’s good features. Indeed, these positive illusions are associated with more commitment, love, satisfaction, trust, and a longer-lasting relationship.

A happy couple’s positive bias also affects explanations for specific positive and negative behaviors, or *attributions*. There are many different explanations for behavior. Specifically, a person can emphasize influences that are either internal, such as personality or ability, or external such as situations or circumstances. The causes of the behavior may also be stable and lasting, or unstable and transient. Furthermore, behaviors can be global or affecting many other situations, or specific and affecting only a few particular situations. Bradbury and Fincham found that people in happy relationships make relationship-enhancing attributions such that positive behaviors are judged to be internal, stable, and global, while negative actions are judged to be external, unstable, and specific. In contrast, unhappy couples make distress-maintaining attributions such that positive behaviors are judged as external, unstable, and specific, while negative behaviors are judged as internal, stable, and global. For example, if a husband brings his wife flowers (e.g., a positive behavior), a happy wife would say this behavior was because he is a nice person and wanted to express his love (internal), will do so again in the future (stable), and will act nicely in other situations (global). Thus, attributions are a way for happy couples to extend and magnify their partners’ good qualities and minimize their bad qualities.

The positive bias indicative of happy couples is also illustrated during instances of relationship difficulties. When a partner is irritating and combative, the other partner has a choice: They can discuss the situation with the partner and try to solve the problem (e.g., voice), they can silently wait for their partner to calm down (e.g., loyalty), they can leave or threaten to end the relationship (e.g., exit), or they can avoid discussion about the problem and nag about unrelated issues (e.g., neglect). Responding to a partner’s destructive behavior in a constructive manner such as voice and loyalty is called *accommodation*. People make these accommodating responses to conflict when they put the long-term consequences for the partner and relationship before their own self-focused desires. By putting the relationship before one’s immediate desire to fight back, a relationship partner is making a *transformation of motivation*. This shift from self-focus to relationship-focus is more likely to occur among people that are securely attached and high in relationship satisfaction. Rusbult and colleagues also see accommodation as a reciprocal process, such that when one partner accommodates,

it tends to increase the other partner's trust and willingness to accommodate in return.

## Social Support

People experience negative and stressful events beyond their relationship, and they often turn to their partner for support and comfort. Perceiving that a partner provides good support in times of distress is correlated with better functioning relationships. However, while believing a partner will be available in bad times is beneficial, many studies show that actual enacted support is not associated with better adjustment. Researchers have suggested that one reason for the detrimental effects of receiving social support is that it signals to the partner that he or she is unable to cope with the stressor, which can be a blow to self-worth and self-esteem. As a way around this drawback of social support, Bolger and colleagues proposed that the most effective support provision is that which goes unnoticed by the distressed recipient, or *invisible support*. Positive event disclosures, or *capitalizations*, also offer an opportunity to provide support without the blow to self-esteem. Gable and colleagues found that supportive responses to positive events can highlight and extend the partner's positive emotions.

## Sexual Satisfaction

Couples that are happy with their sex lives tend to also be happy with their relationships. Similar to general relationship factors, the interdependence or social exchange model can be applied to sexual satisfaction. In order to feel sexual satisfaction, more sexual rewards, few sexual costs, and having one's expectations about the rewards and costs in a sexual relationship favorably met or exceeded are all needed. Sexual rewards include the degree of comfort with their partner and feelings about oneself during sex, while sexual costs include having sex when not in the mood and other situations of mismatched sexual desire and availability. Accordingly, communication is an important predictor of sexual satisfaction. If couples want some things changed in their sexual interactions or are not happy with their sexual frequency, they can talk about the problem and try to improve it.

## Methodology

In order to understand the numerous relationship processes and outcomes, researchers have adopted a range of different methods. Ickes noted that the methods used by relationship researchers can be grouped into six broad categories: self-report, peer report, observation, experimental methods, life-event archival methods, and physiological methods. Qualitative, longitudinal, and priming methods

have also shown to be advantageous in advancing relationship research. The inherent complexity of relationship phenomena suggests the usefulness of multiple levels of analysis such as individual, relational, and societal. Current research offers promising techniques in dyadic data analysis and social relations modeling to address these issues.

SEE ALSO: ► Attachment theory ► Intimacy ► Romantic love

## Coaching Psychology

Anthony M. Grant  
*University of Sydney*

Coaching psychology can be broadly understood as the systematic application of behavioral science, focused on the enhancement of life experience, work performance and well-being for individuals, groups and organizations with no clinically significant mental health issues or abnormal levels of distress. It is the focus on the systematic application of evidenced-based behavioral science and the incorporation of an informed-practitioner model that distinguishes coaching psychology from atheoretical proprietary approaches to coaching.

Coaching psychology is an emerging psychological sub-discipline and closely related to positive psychology. In general terms, coaching psychology sits at the intersection of sports, counseling, clinical, and organizational and health psychology. Clinical and counseling psychologists frequently work with clients who are experiencing or recovering from distress or dysfunctionality. In contrast, coaching psychologists work with well-functioning clients, using theoretically grounded and scientifically validated techniques to help clients reach goals in their personal and business lives. Such goals may be concerned with aspects of personal or organizational well-being, or may be with more concrete material outcomes.

In addition to applied work with clients, coaching psychology is also focused on conducting research into human change and the enhancement of well-being. As such, an evidence-based coaching psychology has the potential to make significant contributions to the positive psychology agenda.

Although the focus on “normal” nonclinical populations is central to delineating coaching psychology from clinical psychology and psychotherapy, the issue of whether or not some coaching clients are using coaching as a socially acceptable form of therapy, and whether some coaches are acting as *de facto* (and untrained) therapists is contentious. Indeed, some studies have found that between 25% and 50% of life-coaching clients have clinical levels of psychopathology. These findings pose serious ethical dilemmas for coaches who are not psychologists or trained mental health professionals, and emphasize the need for such coaches to be well-trained in diagnostic and referral processes.

## The Historical, Intellectual, and Social Context

Historically, the use of the term *psychology of coaching* stretches back to at least 1926 with the publication of Coleman R. Griffith's book *Psychology of Coaching: A Study of Coaching Methods from the Point of View of Psychology*, which explores the use of psychology in sports coaching. Such early references to coaching psychology were almost entirely focused on sport and exercise, and the term *coaching psychology* continues to be frequently used with reference to sport. Since the 1950s some clinical psychologists (e.g., Albert Ellis) have considered their work to involve coaching nonclinical populations for well-being and performance enhancement. However, in the past the term coaching psychology was rarely used in this context, and such work was more commonly referred to as *consultancy* or *counseling*.

Contemporary coaching psychology as a specific academic and applied psychological sub-discipline began to flourish following the establishment of the Coaching Psychology Unit at the University of Sydney in 2000, and the offering of the world's first post-graduate degree in coaching psychology. In 2006 the establishment of a Coaching Psychology Unit at City University, London was another important step in further development of the academic underpinnings of coaching psychology. Worldwide, increasing numbers of universities are offering postgraduate degrees in coaching psychology.

Professional psychology associations have also recognized the emergence of coaching psychology. For example, the Australian Psychological Society (APS) formed an Interest Group in Coaching Psychology in 2002, and the British Psychological Society (BPS) formed a Special Group for Coaching Psychology in 2004. The BPS publishes two coaching psychology journals, *The Coaching Psychologist*, and the *International Coaching Psychology Review*, which is co-published with the APS. The April 2007 issue of the *International Coaching Psychology Review* was a special issue on positive psychology and coaching psychology.

## Overview of the Scholarly Literature

Scholarly literature on nonsports applications of coaching emerged in 1937 with Gorby reporting how older employees coached newer employees in reducing waste in order to increase profit and maximize employee bonuses. The scholarly literature on coaching has since developed, and six overlapping phases or themes are evident: (a) discussion articles on internal coaching in the workplace by managers with employees; (b) the beginnings of more rigorous academic research on internal workplace coaching and its impact on work performance; (c) the beginnings of research into coaching by professional coaches; (d) coaching research aimed at investigating psychological mechanisms and processes involved in human and organizational change; (e) the emergence of a theoretical literature

directed at the professional coach; and (f) research into life and health coaching. Three primary means of reporting and investigating coaching have been used throughout these six phases: (a) descriptive or opinion articles; (b) empirical evaluations based on case studies; and (c) empirical evaluations based on group studies.

The majority of the scholarly literature involves descriptive or opinion articles. There are fewer empirical studies investigating the outcomes of coaching interventions, or studies using coaching as a methodology to investigate the factors and psycho-mechanics of human change. Such studies are becoming more frequent as more researchers develop expertise in designing and conducting coaching interventions. The citation rate of coaching research in the PsycINFO database has increased significantly from 29 citations between 1995 and 1999, to 145 citations between 2000 and 2005, and continues to increase.

## **The Human Potential Movement and Coaching**

The roots of coaching psychology go back to the humanistic traditions of psychology, and are related to the factors underpinning the emergence of the positive psychology movement, and the forces underpinning the human potential movement (HPM) of the 1960s.

The general public and business organizations have a considerable thirst for techniques that enhance life experience and performance. It has been estimated that the total American personal development market will be worth \$12 billion annually by 2008. However, psychology as an academic discipline and an applied profession has not met the needs of consumers in the normal adult population. This neglect has left the door open for other, arguably, less qualified individuals to dominate the personal development market.

The social, political and philosophical upheaval of the 1960s and 1970s spawned a wide range of self-development methodologies, including encounter groups, personal growth workshops, and community living experiments (communes). In many ways the HPM was a multifaceted aspirational religion with its own mores, gurus, prophets, and tribes. The HPM was based on an "anything goes" eclecticism, in which methodologies, techniques and philosophies from a wide range of perspectives were combined. While such diversity has strengths, frequently the result was a conceptually incoherent smorgasbord of esoteric positions, methodologies and ideologies. Further, the HPM embodied an uncritical anti-intellectualism which eschewed scientific and rigorous investigation.

The HPM heavily influenced the development of the contemporary commercial coaching industry. For example, one of the early pioneers of commercial life coach training, Thomas Leonard, drew heavily on the approaches used by Landmark Education, a popular personal development program. Unfortunately, anti-intellectualism and an accompanying suspicion of scientific evaluation is a noticeable aspect of many commercial proprietary coaching schools, and this approach

stands in stark contrast to a science-based psychology and the evidence-based approach central to coaching psychology.

## **The Evidence-Based Approach to Coaching**

Evidence-based coaching has the potential to delineate between approaches to coaching which are based on ad-hoc adaptations of “pop-psychology” or personal development programs, and coaching psychology which explicitly draws on relevant theory and research. Adapted from its use in the medical context, the use of the term *evidence-based* in relation to coaching means far more than simply producing evidence that a specific coaching intervention is effective, or predominantly relying on outcomes of double-blind randomized controlled trials as a guide to efficacy.

Evidence-based in this context refers to the intelligent and conscientious use of best current knowledge in making decisions about how to deliver coaching to coaching clients, and in designing and teaching coach training programs. Best current knowledge is up-to-date, valid and conceptually coherent knowledge from relevant areas such as, but not confined to, behavioral science, economics and business, and philosophy.

The use of such knowledge requires that practitioners receive specialized tertiary-level training from suitably qualified teachers in understanding, interpreting and evaluating scientific research, and applying such knowledge to design and implement coaching interventions. Informed-practitioners are not positioned as significant producers of research, rather they are expected to be educated and critically-thinking consumers of research.

Theoretically-grounded *case conceptualization* is also central to evidence-based coaching. A case conceptualization is an overview or map which operationalizes the factors that maintain the client’s presenting issue and the factors that may help create solutions. As a working hypothesis, a case conceptualization is developed collaboratively with the client, and is subject to on-going modification as new information emerges during the coaching process. The use of theoretically-grounded case conceptualization which draws on publicly-available peer-reviewed theory and research, distinguishes coaching psychology from proprietary coaching systems which frequently present over-simplistic “six steps to your perfect life” coaching models.

## **The Relationship between Coaching and Positive Psychology**

Although the links between the goals of positive psychology and the goals of coaching psychology are clear, in relation to theoretical frameworks, coaching psychology is more inclusive with coaching psychologists employing a wide-range of theoretical perspectives in their work, not just positive psychological frameworks.



These perspectives include the psychodynamic, systemic, ontological, existential, cognitive-developmental, cognitive-behavioral, solution-focused and cognitive-behavioral, in addition to strengths-based perspectives.

There has been considerable progress made by positive psychologists in developing theoretical frameworks for understanding human strengths. However, most of the work thus far within the positive psychology arena has been about investigating correlational relationships between various constructs, for example, the relationship between self-concordance, well-being, goal attainment and goal satisfaction; the measurement of constructs such as well-being or a taxonomy of human strengths.

There has been relatively little work within the positive psychology arena about how best to operationalize positive psychology constructs within a helping relationship such as coaching. One way to further develop the emerging field of positive psychology is to extend past cross-sectional or correlation work by designing interventions which use coaching as an experimental methodology for applied positive psychology. This may be an important future role for coaching psychologists.

## **Major Dimensions of Coaching Psychology**

### **A Tripartite Meta-Typology of Coaching**

There are many different applications of coaching methodologies. These include, but are not limited to, life or personal coaching, executive coaching, transition coaching, business coaching, health coaching, sales and communications coaching, career coaching, group coaching, emotional intelligence coaching, and so on. In reviewing these applications a useful tripartite meta-typology emerges, in that coaching applications can be wholly or partially subsumed under one of three key categories: skills coaching; performance coaching; and developmental coaching.

Skills coaching focuses on developing a specific skill set. This kind of coaching might be a fairly short intervention – perhaps one or two sessions. Coaching for skills often requires the coach to focus on specific behaviors. The coach may model the required skills, and coaching sessions usually encompass a rehearsal and feedback process. Such coaching could involve improving communications skills, sales skills or rehearsing for presentations or negotiations.

Performance coaching is about improving performance over a specific time frame. In the workplace this time frame could be from one month to several years. Here, coaching is more focused on the processes by which the student can set goals, overcome obstacles and evaluate and monitor their performance over time as they work towards their goals. Performance coaching tends to be more strategic than skills coaching, and in the workplace may take place following a performance review.

Developmental coaching also takes a broader strategic approach, often dealing with more intimate questions of personal and professional development. This kind of coaching may focus on facilitating “insight moments,” enhancing emotional

competencies, or working more effectively with team members. Developmental coaching has been described as therapy for the people who don't need therapy, and often involves the creation of a personal reflective space where the person can explore issues and options and formulate action plans in a confidential, supporting environment.

Each of these typologies is not discrete and separate from the others; rather there is some overlap between them. For example, a coaching intervention which focuses on enhancing presentation skills for an introverted person would have a substantial developmental element, and a developmental coaching program which is targeted at enhancing leadership competencies may include some skills coaching. Nevertheless, coaching sessions and indeed whole coaching engagements tend to fall into one or another of these three categories.

## **Executive, Workplace, Life, and Health Coaching**

Executive coaching encompasses a vast range of services and specialties; coaching for enhanced strategic planning; presentation skills; anger and stress management; executive management team building and leadership development. Much executive coaching is primarily developmental coaching with interwoven skills and performance components.

Workplace coaching can be understood as coaching that takes place in workplace settings with nonexecutive employees. It is on-the-job coaching by line managers and supervisors, aimed at improving productivity and developing an individual worker's skill. Frequently workplace coaching involves impromptu or "corridor coaching," rather than formal sit-down coaching sessions. Workplace coaching for nonexecutives has attracted less publicity in the popular media than executive or life coaching.

Life coaching is predominantly about more personal issues than workplace coaching. In general, life coaching takes a holistic approach in which the person spends time examining and evaluating his or her life, and then systematically makes life-enhancing changes with the support of a coach. Key issues often focus on work/life balance, managing finances and developing new career directions. The concept of life coaching has attracted a wide-range of practitioners, from those solidly grounded in psychology, through to more esoteric approaches. Some sections of the life coaching industry have made sensationalistic and extraordinary claims, and there are justified concerns that poorly-trained life coaches are acting as de facto and unqualified mental health practitioners.

Health coaching can be understood as being the practice of health education and health promotion within a coaching context, which is aimed at facilitating the achievement of health-related goals and well-being. Health coaching is emerging as the fastest growing area of coaching. The coaching outcome research that is published in the medical press (e.g., Medline) tends to be of better quality than the outcome research published in the psychology press (e.g., PsycINFO) or the

business press (e.g., Business Source Premier). Much of the health-related coaching is being conducted by dietitians, nurses and other health professionals rather than psychologists, yet there is a clear role for coaching psychologists who have a background in the health sciences. Positive psychology will prove to be a key theoretical basis for coaching, and this may particularly be the case in relation to health coaching.

## **The Coaching Relationship and the Role of Expert Knowledge in Coaching**

The dynamics of the coaching relationship differ from the often overtly hierarchical relationship frequently associated with consulting, clinical or counseling work. Applied and therapeutic psychologists tend to work from the position of being the expert who has access to privileged knowledge which is used to diagnose problems and prescribe treatment. Clearly, psychologists have expertise that their clients do not have; otherwise there would be little reason for the client to employ them.

The issue is about the role of expert knowledge in coaching, and how it should be used within the coaching relationship. Expert knowledge in coaching can be understood as highly specialized or technical knowledge held by the coach, in an area where the client has less expertise than the coach, and where such knowledge is related to the client's goals. The notion of the "coach as expert advice-giver" is somewhat controversial, and there are a range of perspectives on this issue. For example, the direct approach of Marshal Goldsmith which emphasizes robust feedback and advice-giving, stands in contrast to Sir John Whitmore's work which emphasizes a nondirectional ask-not-tell approach.

The question is not which of these approaches is right or wrong, but rather which best helps the client reach their goals, and which is the most appropriate at particular points in any specific coaching conversation. This is about striking the right balance between process facilitation and content or information delivery, and this balance varies at different points in the overall coaching engagement and within individual coaching sessions. The skillful coach knows when to move across the ask-tell dimension, and knows when to promote self-discovery and when to give expert-based information.

The challenge is to master such flexibility in working with coaching clients. Coaching requires a sophisticated skill set and the ability to be able to draw on expert knowledge, while at the same time facilitating the self-directed learning which lies at the core of the coaching enterprise.

## **Research Issues and Future Challenges**

Research issues that have been identified include, detailing competencies and practices that distinguish coaching psychology from counseling, clinical and other applied

psychological practices. This will be a complex endeavor. The definition of and boundaries between existing psychological subdisciplines are vague as they stand. While competencies are useful heuristics to define the central aspects of a specific subdiscipline, they say little about the overlap between various sub-discipline practices. Perhaps more attainable is the development and validation of coaching methodologies that are effective and engaging for nonclinical populations, and the emergence of specific areas of coaching psychology practice.

Reliable outcome measurement methodologies are vital for the development of coaching psychology, especially in the areas of goal attainment scaling and the development of objective measures that overcome the limitations of self-report measures. This is particularly relevant in organizational contexts where return on investment is of interest.

Future research should also examine which positive psychology measures are responsive to change through coaching. Some measures may be assessing immutable trait-like facets or have ceiling effects, and because much of the positive psychology research to date has been correlational or cross-sectional these factors may not as yet have become apparent.

The self-help and personal development industry is notorious for claiming sensational results, self-promotional misrepresentation and unethical practice. The commercial coaching industry abounds with meaningless pseudoqualifications and unqualified self-appointed “international thought leaders.” As interest in evidence-based coaching psychology and positive psychology continues to grow, a key challenge will be to avoid such pitfalls and resist diluting rigorous scientific foundations in the quest to make its benefits accessible.

Meeting these challenges will help ensure that coaching psychology can indeed contribute to making an applied positive psychology effective, thereby enhancing the productivity and quality of life of individuals, organizations, and the broader community.

SEE ALSO: ► Applied positive psychology ► Counseling psychology  
► Goals and goal-setting theory ► Life coaching ► Sport psychology

## Cognitive Appraisal

Susan Folkman and Judith Tedlie Moskowitz

*University of California, San Francisco*

An individual's *cognitive appraisal*, or judgment about the personal significance of an event, influences the extent to which the event is perceived as stressful and helps account for individual variation in response to events ranging from life events to day-to-day hassles. This concept was advanced by Richard Lazarus, PhD, in a landmark book, *Psychological Stress and the Coping Process*, published in 1966. That book and its successor, *Stress, Appraisal, and Coping* by Lazarus and Folkman,

published in 1984, present a cognitive theory of stress that has provided the theoretical foundation for much of the research on this question that has occurred since that time.

## Cognitive Theory of Stress

The cognitive theory considers stress a dynamic, transactional process that is shaped by the person, the environment, and the relationship between them. At the heart of this cognitive theory of stress is the concept of cognitive appraisal. People are constantly making judgments about the meaning or personal significance of what is happening in their environment. These judgments are referred to as appraisals. Stress and coping theory defines two kinds of appraisal, primary appraisal and secondary appraisal.

*Primary appraisal* asks the question “Am I okay?” The answer is shaped by the person’s values and goals and how these are affected by a given situation. *Goals* refer to all types of goals, ranging from proximal and concrete (I plan to exercise for 30 minutes today) to distal and abstract (I want to lead a meaningful life). *Values* refer to “mattering” – how much a given goal matters, how valued is the goal.

Appraisals that “I am not okay” occur when there is a threat, harm, or challenge to valued goals. The appraisal process determines the personal meaning of the harm, threat, or challenge. A goal common to new car owners may be to protect a new car from dents and scratches. A dent on the fender of the car will be more stressful for the person who prizes that car above all other cars than for a person for whom the car is merely a means of transportation. The meaning of a threatened lay-off will differ for a person who is the single head of a household than for a person whose income is not critical for a family’s well-being. The meaning of a project presentation will be different for the person who is being considered for a promotion than for an individual for whom the presentation is to update coworkers about a project’s status.

Another way of phrasing the question asked by primary appraisal is “What’s at stake for me?” The person might feel his self-esteem, his or her sense of competence, financial well-being, or the well-being of a close other is at stake. These “stakes” can be thought of at a formal level as goals.

Primary appraisal is also colored by the person’s beliefs about him/herself and the world around him or her. These beliefs operate like perceptual lens through which information is filtered during the appraisal process. People who view the world as unjust, for example, are probably going to appraise a problem with an employer as more threatening than people who view the world as just. Those who believe there is a divine plan, and that everything happens for a reason, are likely to appraise harm, such as a diagnosis of cancer, as less stressful than those who do not share this belief.

*Secondary appraisal* asks the question “What can I do?” and takes into account the individual’s psychological and material resources for addressing the problem

(e.g., money, time, social support, self-esteem). Secondary appraisal is often cast in terms of personal control – “Is there something I can do to control the situation, or is it a situation I have to accept?” This appraisal is often complex. For example, there may be something that can be done to change one aspect of a situation, but not another. For instance, in an argument Jennifer may appraise the probabilities of getting Ben to change his mind as very low, but Jennifer may be able to control the emotional heat that is expressed during the argument. Sometimes there is a way to change the outcome of a situation, but to exercise that option may cause conflict elsewhere. This is often the case when money is needed to solve a problem. The money may be needed for more than one purpose. To use it to deal with the immediate problem – say pay a bill – may mean that another bill goes unpaid. And in some cases there are no options for controlling the situation.

Together, primary and secondary appraisal, determine the stressfulness of a harm or loss, a threat, or a challenge. The greater the personal significance and the less adequate the resources and options for coping, the more intense the appraisal of harm, loss, or threat. *Challenge* refers to the possibility of mastery or gain as a result of the stressful experience.

## **Appraisal and Emotion**

Cognitive appraisal is not just “cool” information processing. Appraisals have to do with the evaluation of personal meaning and options for coping. Those situations that are seen as a threat, harm, or challenge to valued goals and for which there are few options for personal control have personal significance and therefore become emotionally charged. The appraisals of harm or loss generate negatively toned emotions such as anger, sadness, or guilt; threat generates negatively toned emotions such as fear and worry. Challenge is accompanied by positively toned emotions such as eagerness and excitement, as well as negatively toned emotions such as fear. In his 1991 book, *Emotion and Adaptation*, Lazarus defines specific cognitive appraisals, what he called “core relational themes,” underlying many different emotions.

Most situations are complex and can therefore involve complex appraisals of threat, harm/loss, and challenge. The loss of a job, for instance, involves not just loss but a threat to future well-being. The search for a new job may be appraised as a challenge, but challenges always include the possibility of failure, which means that challenge travels with at least a degree of threat.

## **Appraisal and Coping**

The appraisal process is key to determining how the person will cope with the situation. When the secondary appraisal process indicates that there are options for control, the person is likely to choose cognitive or behavioral coping strategies

that are problem-focused such as information gathering, decision making, negotiating, or taking a specific strategic instrumental action. When the secondary appraisal process indicates that the situation is not within the person's control, that there's nothing the person can do to improve matters, the person is likely to engage in emotion-focused coping, such as distancing, seeking social support, or cognitive reframing of the situation, to regulate distress.

In addition to problem- and emotion-focused coping, situations that don't lend themselves to resolution and that persist over time often elicit a third kind of coping, meaning-focused coping. Meaning-focused coping draws on the individual's values, goals, and beliefs to motivate and sustain coping over the long term. Meaning-focused coping, for example, helps remind the person why this situation is important, why it is important to keep going, and ways in which the person is developing new strengths and resources. Meaning-focused coping often generates positive emotions, even when situations are dire. Positive reappraisal is an example of meaning-focused coping and includes coping responses such as seeing the silver lining, the possibilities for good things that can come out of the stressful situation. For example, in the context of severe chronic stress such as providing care for a terminally ill loved-one, positive reappraisals might include "I've learned a lot from this situation" "I'm a much stronger person than I thought" or "This situation gives me the opportunity to show my partner how much I love him." The exploration of positive emotions and the appraisal and coping processes that generate them in the midst of stress, constitutes one of the newest directions for stress and coping research.

## Appraisal and Adaptation

Appraisal has adaptive significance at fundamental levels. A failure to appraise a real danger realistically can result in great harm to the individual. Conversely, the failure to evaluate a benign situation realistically will lead to inappropriate responses that can cause difficulty.

The quality of ongoing reappraisals of the current status of the stressful situation has the same kind of adaptational significance as the appraisal of the originating situation. The stress process, including appraisal and coping, is inherently dynamic. Stressful situations change for a variety of reasons: there may be changes in the environment independent of the person, changes brought about by coping, or changes in the appraised personal meaning of the situation. Realistic reappraisals are important so that the appropriate coping responses can be applied. Sometimes a reappraisal will suggest that a situation that was at first considered changeable is no longer viewed as such. This reappraisal would affect coping. For example, if the person had been pursuing a goal that is now appraised as unrealistic, the coping might involve relinquishing that goal and coping with its loss.

SEE ALSO: ► Adaptability ► Coping ► Emotional approach coping  
► Proactive coping

## **Collective Self-Esteem**

Julie A. Garcia<sup>a</sup> and Diana T. Sanchez<sup>b</sup>

<sup>a</sup>*California State Polytechnic University, San Luis Obispo*; <sup>b</sup>*Rutgers University, New Brunswick*

Personal characteristics – unique attributes, abilities, traits, and values – and also group memberships – gender, religious affiliations, sexual orientation, race, and political affiliations – all shape our self-esteem. While *personal self-esteem* is defined as the feelings of self-worth one obtains from one's personal characteristics, *collective self-esteem* is defined as the feelings of self-worth one derives from one's group memberships.

### **Measuring Collective Self-Esteem**

Luhtanen and Crocker developed a measure of collective self-esteem that includes four subscales: membership, importance, public regard, and private regard. The membership subscale measures perceptions of one's worth as a social group member. The importance subscale indicates how central that social group is to the individual's self-concept. The public regard subscale measures perceptions of how others view one's social groups. The private regard subscale indicates personal beliefs of one's social group's value.

Luhtanen and Crocker's measure assesses general self-esteem tied to groups, but can also be modified to address particular groups. Researchers have used this scale to measure a wide array of group variables, including: gender, race, mental health status, and sexual orientation. In addition, researchers have used this scale to create an overall collective self-esteem score, and have also examined the subscales, and their correlates, separately.

### **Collective Self-Esteem as a Moderator of Reactions to Threat**

People are motivated to maintain a positive image of their social groups. Tajfel and Turner outlined ways people strive to preserve and inflate positive collective self-esteem. For example, when the value placed on one's social group comes into question, a person might dissociate from that devalued ingroup, attempt to elevate the status of that ingroup by competing with outgroups, or creatively compare one's ingroup to outgroup members such that one's ingroup comes out on top.

Collective self-esteem influences how a person will respond when their social group's image is called into question. For example, Crocker and Luhtanen found



that private regard influenced how participants rated ingroup and outgroup members following either group success or failure feedback. When participants received group failure feedback, they tended to show greater tendencies toward ingroup favoritism and outgroup derogation compared to those with lower private regard or those who received group success feedback. In other words, the participants who received group failure feedback experienced a blow to their collective self-esteem and either perceived an ingroup member more favorably or an outgroup member more negatively in order to repair their collective self-esteem. Thus, this finding highlights that people are motivated to maintain positive collective self-esteem and will react to ingroup and outgroup members in ways that will preserve or enhance those positive group images.

Collective self-esteem also influences when a person will experience threat. Some research on social comparison has found that people perceive greater self-esteem threat when performing well in a higher performing group, compared to a lower performing group, known as the “big-fish-little-pond-effect” (BFLPE). Collective self-esteem scores attenuate this effect. When people have high collective self-esteem, group achievements positively affect self-esteem. Thus, only people low in collective self-esteem show the BFLPE. In other words, it is not threatening for people to perform well in a high performing group when their self-esteem is based, in part, on that group’s performance (i.e., they have high collective self-esteem).

## **Collective Self-Esteem and Psychological Well-Being**

Empirical research has also shown a positive correlation between collective self-esteem and various indicators of psychological well-being. Primarily, this research has investigated race- and gender-specific collective self-esteem because gender and race represent ascribed social groups that apply to everyone. This work indicates that some dimensions of collective self-esteem play a more important role in psychological health than others.

### **Private Regard**

Private regard measures a person’s sense of pride in their social identities. Race-specific private regard typically has a moderate to strong positive correlation with psychological health. Race-specific private regard predicts greater self-esteem, superior psychological health, greater self-efficacy and fewer depressive symptoms among African Americans, White Americans, Asian Americans, and Latinos. Thus, it is not surprising that fostering racial pride has a strong link to psychological health, especially given that some theorists suggest that creating racial pride is an ultimate goal of racial identity development. Research on gender-collective self-esteem yields similar results: greater private regard among women predicts greater self-esteem and less depressive and anxious mood.

## Public Regard

Public regard refers to a person's perception of the value that others place on their social identities. Although some groups indicate low public regard due to stereotypes and discriminatory beliefs, this does not translate to experiencing low self-esteem, as initial researchers had proposed. In other words, people who are members of devalued social groups do not necessarily internalize the negative perceptions that others hold for their group. While public regard does not predict the self-worth of devalued group members, lower public regard does predict anxious mood and psychological distress among women and African Americans. However, Sellers and Shelton suggest that the link between public regard and distress may be, at least in part, explained by greater perceptions of discrimination. African Americans who indicate low public regard perceive greater racial discrimination, which, in turn, predicts poorer mental health outcomes. However, perceptions of low public regard may also simultaneously attenuate the negative effects of racial discrimination. Perceptions of public regard may essentially operate as a proxy of the extent to which devalued group members are aware of their stigmatization in the greater society. This is likely to explain why public regard buffers against experiences of discrimination. When people from devalued groups expect that others devalue their group (i.e., have low public regard), this helps them cope with experiences of discrimination, suggesting that expectations of rejection may soften the blow of discrimination. Minorities and women who report lower public regard understand that the world at large devalues their particular identities; thus they may learn to expect, and consequently develop ways to cope with discrimination.

## Importance of Social Identities

The centrality or importance of social identities rarely, if ever, directly predicts psychological well-being or self-esteem. However, the centrality of social identities may intensify the link between other dimensions of collective self-esteem and psychological health. For example, the positive link between African Americans' private regard and self-esteem is stronger for highly identified African Americans than less identified African Americans. Similar to public regard findings, highly identified African Americans perceived more discrimination than less identified African Americans. However, high identification buffered the negative effects of racial discrimination. Thus, for African Americans and possibly other devalued groups, identification and low public regard emerge as both a risk factor for perceiving discrimination but also a buffer for associated psychological health.

Although most initial research on collective self-esteem has looked at single group memberships in isolation, a growing number of researchers are now examining the interplay of the collective self-esteem of multiple identities on outcomes. As this research area grows, we will have a better sense of the complexity of multiple group memberships and their influences.

SEE ALSO: ► Collective well-being ► Pride ► Self-esteem ► Well-being

## Collective Well-Being

Eunkook M. Suh and Minsun Sung

Yonsei University

Collective well-being refers to a sense of satisfaction or happiness derived from or related to the collective dimension of the self. The collective self refers to self-conceptions that are based on one's membership in groups or social categories. It contains psychological and physical features that characterize one's groups (e.g., ethnic group, gender, nationality, social class), which may or may not characterize the person as an individual. This collective aspect of the self coexists and, theoretically, is distinguishable from personal characteristics, such as abilities, skills, and preferences (personal self) or the self-definitions derived from experiences with an emotionally invested significant other (relational self).

The collective dimension of identity affects the person's sense of well-being, independently of the personal or the relational dimension. Merely belonging to a socially stigmatized group (e.g., gay), for example, may create *minority stress* that leads to various negative mental health consequences. Conversely, a strong performance of a group one identifies with (e.g., Red Sox winning the World Series) can temporarily boost the individual's morale and sense of well-being. Because the social reputation of one's group has a direct impact on the person's esteem, people try in various ways to protect and enhance the positive image of the group they belong to. Even when groups are minimally defined, for example, people tend to display an *ingroup bias* – the tendency to evaluate members of their own group favorably while denigrating members of the other. People also try to emphasize their associations with a successful, worthy group, whereas they find ways to distance themselves from stigmatized, unfavorable groups or organizations. Such positive spillover of group success or the distressing effects of group stigmatization on personal happiness may occur even when people have had no direct involvement in the group's action.

Well-being and the collective aspects of the self have been examined together in a number of different research contexts. Group differences exist in the degree to which the collective dimension of the self influences one's overall psychological well-being. In general, among members of dominant social groups who typically find themselves in the majority status, a relatively weak association exists between the collective aspects of identity and psychological well-being. For members of ethnic or other minorities, for whom group memberships represent an important aspect of the self, the collective experiences tend to be more strongly related with overall well-being.

At an individual difference level, the link between perceived group status and psychological well-being is mediated by levels of *collective self-esteem* (CSE), a trait-like construct that reflects the "extent to which individuals generally evaluate their social groups positively" (Crocker & Luhtanen, 1990, p. 60). Collective self-esteem is composed of four interrelated yet distinct facets. It consists of how individuals privately evaluate their social group (*private CSE*), how individuals believe

others evaluate their social group (*public CSE*), the role of group membership in the self-concept (*importance to identity*), and the individuals' sense of how well they function as members of their social groups (*membership CSE*). Even after taking personal self-esteem into account, private CSE is related to increased life satisfaction and public CSE is related to decreased hopelessness. Within the US, the various CSE components and psychological well-being measures tend to be associated more tightly among ethnic minority groups (African Americans, Asian Americans) than among Caucasians.

Cross-cultural research has also contributed to illuminating the pervasive role of the collective identity in shaping the various emotional and cognitive qualities of well-being. People sample the three types of selves – personal, relational, and collective – with “different probabilities, in different cultures” (Triandis, 1989, p. 507). In cultures where the collective aspects of the self are highly complex and chronically accessible to the person (e.g., collectivistic cultural regions, such as East Asia), the norms, roles, expectations, and values of the group play major roles in determining the quality and experience of well-being. When evaluating one's overall life satisfaction, for instance, collective-oriented cultural members tend to base this judgment as much on social norms (i.e., perceived social desirability of life satisfaction) as on their inner emotional experience. In contrast, in cultures where the personal identity is chronically more salient than the collective identity (e.g., highly individualistic cultures), life satisfaction judgments are based almost exclusively on one's private, subjective emotional feelings. Another cultural difference concerns the general attitude about happiness. Whereas the pursuit and expressions of personal happiness are viewed as given rights in some cultures, these behaviors are often seen as a nuisance factor that disrupts the collective harmony. As a result, people in such collectivist cultural contexts may seek and express happiness in a relatively passive manner, which in turn could partly explain why self-reported levels of well-being tend to be lower in highly collective-oriented societies than in other parts of the world.

Another active research issue concerns the relationship between the various collective selves within the person, and their consequences on psychological well-being. Because individuals identify themselves with multiple social groups, various collective identities co-exist within each person. Whether these multiple collective identities clash or are consonant with each other has direct implications on the person's well-being. This issue has been examined most extensively in the context of acculturation. An individual who moves from one culture to another inevitably faces the issue of managing multiple cultural identities. The multiple identities may be compatible with each other for some individuals, but for some others, these identities may carry conflicting demands and expectations. Not surprisingly, in general, individuals who successfully blend the different collective identities into a coherent whole enjoy higher levels of psychological well-being than those who fail to do so. Various routes are taken to synthesize multiple collective identities. Individuals may “add” a new identity to an existing one (*integration*), or switch back and forth between identities in response to the

immediate context (*alternation*), or develop a new identity that is different from the sum of existing multiple identities (*synergy*). In addition to the conflict between different collective identities, psychological well-being is related with the overall balance among the collective, personal, and relational self in the self-system. Rather than having one type of self dominating the other two, maintaining a relatively equal amount of weight among the three aspects of the self is predictive of higher well-being.

Psychology has witnessed an unprecedented amount of research devoted to the topic of well-being in the last decade. However, much of the existing research has taken place in Western cultural regions that traditionally accept the inner, personal self aspects of identity as most important and self-defining. As a result, research attention has been devoted much more heavily on private features (e.g., mood, cognitive styles, traits) than on the collective elements of well-being. Humans are fundamentally social beings. Appraisals of one's circumstances and functioning as a member of a social group also have a considerable impact on people's experience and judgments of well-being, factors that are relatively understudied in current psychological research.

SEE ALSO: ► Civic responsibility and virtues ► Collectivism  
► Conscientiousness ► Cultural pluralism ► Social support ► Well-being

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## Collectivism

Jennifer Teramoto Pedrotti

*California Polytechnic State University, San Luis Obispo*

*Collectivism* is defined as a social model in which members are more invested in the interests of the group to which they belong than to their own individual interests. Cooperation is valued more heavily than competition in collectivist cultures, and group needs and preferences take precedence over those of the individual. Core values of these types of cultures include social embeddedness, collective identity, group solidarity, and group decision-making. This type of culture is often discussed in contrast to *individualist* cultures in which the interests of the individual are valued more strongly than those of the group. Today, researchers believe that although these two social models are orthogonal, they are not two

ends of a continuum but rather two distinct patterns. Harry C. Triandis, a noted researcher in this area, offers the related term *allocentric*, which is used to describe an individual who adopts collectivist beliefs.

## Who is Collectivist?

In every culture there are individuals who define themselves as allocentric, or group-oriented; however certain cultures around the world are more collectivistic as a whole. Asian (e.g., Japanese or Indian) and Latin American cultures (e.g., Mexican or South American), tend to be more collectivistic in their beliefs. Individuals of Asian American, Latino American, African American, and American Indian descent may also follow the collectivist social pattern within the US, though this may depend upon the degree to which the individual is assimilated to the more individualist Western values of the majority culture in the US. Approximately two-thirds of the world's population resides in cultures defined by collectivist belief systems.

## Collectivist Viewpoints of Self and Other

Though many constructs within the field of positive psychology discuss attributes that originate within the self, individuals in collectivist cultures may not view strengths as stemming from the self, but rather the group. Researchers have found that while allocentric individuals can accurately describe their internal qualities and characteristics, "such internal features of the self are not necessarily regarded as the most diagnostic characteristics of an individual" (Suh, Diener, Oishi, & Triandis, 1998, p. 483). It may be aberrant for a member of a collectivist culture to think of emotional experiences, or other within-self characteristics, as emerging from the personal experience of the self. Researchers Ed and Marissa Diener have found that correlations between individuals' scores on measures of life satisfaction and self-esteem were strongly affected by their home country's adherence to collectivist or individualist tendencies. Specifically these researchers found that in countries with high collectivism ratings, the correlations between self-esteem and life satisfaction were less strong than those found in countries with high individualism ratings. Furthermore, researchers Shinobu Kitayama and Hazel Rose Markus have found that positive feelings and judgments about oneself are not found to be as strongly linked in members of collectivist cultures as compared to those in individualistic cultures. In fact group satisfaction and judgments of the group may play more central roles in the origin of positive individual feelings. Thus, it may make more sense to discuss strengths from a group-oriented framework when describing and studying collectivist cultures. Exploration of topics such as collective self-esteem (as opposed to individual self-esteem), and collective life satisfaction or well-being may be more appropriate.

## Viewing Strengths from a Collectivist Framework

As with any topic in psychology, it is important to pay attention to context when making judgments about strengths and weaknesses. While certain strengths may be thought of by some to be universal, research has not always found this to be the case. Within a collectivist framework, qualities that set an individual apart from his or her peers are not valued in the same way that they may be in individualist cultures. Uniqueness, for example, is a core strength in individualistic ideology, particularly within the US, but is not valued in the same way by collectivist groups. Similarly, the construct of autonomy is not given a positive status within collectivist cultures; instead dependence and group reliance are valued.

Other constructs may be less valued by individualist cultures, but determined to be highly useful in collectivist groups. Harmony is viewed within these cultures as playing a central role in achieving a good life. The ability to get along and promote harmonious relationships between others is valued as a top strength within such cultures. Compassion is another highly valued construct within collectivism. Many Eastern cultures (which are primarily collectivist) emphasize the importance of being kind to one another, and of helping one's neighbor as a core cultural value. Both harmony and compassion are viewed as central to achieving happiness within these collectivist frameworks.

It is also possible that collectivism itself may be a strength in and of itself in some situations. For example, collectivism may promote a feeling of belonging to an ingroup among members of these cultures. It may also provide the individual with a group focus, empathy toward others, or an ability to manage a large social network for support. More research is needed in this area to define and investigate strengths from this viewpoint.

## Future Directions

Future studies in this area would be advantageous to the field of positive psychology for many reasons. Links have been found in the past between collectivism and other positive attributes such as generosity, equity, and enhanced ability to develop interpersonal relationships. As these attributes are of interest to the field of positive psychology, it may be that encouraging and/or cultivating a collectivist viewpoint may assist us in attaining these positive characteristics.

Furthermore, Snyder and Lopez discuss the benefits of becoming aware of both our own individualistic and collectivistic within-person attributes (the "ME/WE balance;" 2007, p. 467) and posit that all individuals may possess some features of each style. Certain features may be particularly helpful in certain environments, e.g., being invested in group outcomes (a collectivistic trait) when working as a part of a team. Knowing more about these characteristics may allow us to use these inherent strengths to help us in our daily lives.

Finally, Snyder and other researchers have hypothesized that as more and more women enter the field of psychology, some of the traditional values associated with this gender (e.g., “harmony and relationships, egalitarianism . . . communal and other awareness,” Snyder & Lopez, 2007, p. 486) may become more highly valued. Many of these values are appreciated as key in a collectivist framework. As such, it follows that research coming from a collectivist viewpoint may be more prevalent as the demographics of the field of psychology continue to change.

SEE ALSO: ► Collective self-esteem ► Collective well-being  
► Cultural values ► Individualism

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## College Student Development

Laurie A. Schreiner  
*Azusa Pacific University*

College student development is a field of study as well as a philosophy of higher education that emphasizes holistic growth and optimal functioning among college students. Students are viewed as unique individuals whose growth is enhanced by campus programs and services that integrate the social, intellectual, physical, and spiritual components of their development. The entire college experience, whether in or out of the classroom, is seen as the learning environment that contributes to the students’ development.

Prior to the late nineteenth century, American higher education viewed its responsibility as educating the whole person – body, mind, and spirit. Faculty expected to shape their students’ character as well as their intellect. As universities experienced rapid growth and change during the early twentieth century, professional student affairs positions were developed to oversee students’ social development and the faculty’s role was narrowed to intellectual development. As early psychological theories influenced the culture, theories of students’ development began to flourish. These theories varied in their emphasis and focus and can be categorized as one of four basic types: cognitive-structural, psychosocial, typological, and person-environment interaction.

The cognitive-structural theories of college student development are based on the theories of Piaget and Kohlberg. They include Perry’s scheme of intellectual



and ethical development, King and Kitchener's reflective judgment model, Baxter Magolda's epistemological reflection model, Gilligan's model of women's moral development, Fowler's stages of faith, and Parks' model of spiritual formation. Each of these theories articulates students' cognitive and moral or ethical development through a series of universal stages, with a focus on the process of making meaning.

The psychosocial theories of college student development complement the cognitive-structural theories in their emphasis on developmental stages. They build primarily on Erikson's theory of identity formation and articulate developmental tasks that students must master at each stage. These theories are exemplified in the work of Chickering, whose seven vectors of student development describe the journey toward maturity in the college years. Other theories focus more specifically on identity development: Marcia's model of identity status, Josselson's adaptation of that model for women's identity development, and Phinney's adaptation of Marcia's model in her formulation of ethnic identity development.

Other models of racial and sexual identity formation have developed from a social construction viewpoint. Cross' theory of Black identity and Helms' adaptations of that theory view students' racial identity development as a series of experiences that move students toward a greater recognition of internalized racism so that they can develop and express a positive racial identity. D'Augelli's sexual identity model views sexual identity as a social construction whose processes are mediated by students' cultural and political contexts. In contrast, Cass' theory of sexual identity formation views sexual identity as a personal developmental progression from dissonance to acceptance.

Less pervasive in their influence on student development professionals, the typological and person-environment interaction models of college student development differ from the cognitive-structural and psychosocial models. Rather than addressing the process or content of students' development in the college years, the typological models emphasize distinctive, relatively stable features that characterize students from early in life, while the person-environment interaction models focus on the environment's power to influence and shape student behavior.

Some challenges to the existing models of college student development have arisen over the years. Issues of gender identity development have surfaced as researchers note the inadequacy of theories built on research conducted solely with white males. Both racial and sexual identity theory have raised important questions about the social construction and political contexts of identity formation. And few researchers view the stages implicit in psychosocial or cognitive-structural theories as irreversible or even sequential.

Chickering's psychosocial model of student development tends to remain the dominant paradigm among college student development professionals. Chickering uses the term *vectors* to denote multiple trajectories on the student journey toward maturity, rather than specific or mutually exclusive sequential stages. These vectors contain recurring tasks whose resolution affects how future challenges are

handled. Students travel the vectors at their own pace, may be involved in more than one vector at a time, and may revisit a given task during a time of crisis. Most students complete the journey within two to seven years.

As students progress through the vectors they gain greater levels of self-awareness, confidence, complexity, and integration. When a university provides the necessary challenge and support for students during these tasks, the student is better equipped to resolve the issues presented and to flourish in the campus environment. As positive psychology has begun to influence the field of higher education in the last decade, particular concepts highlighted by positive psychologists have been adapted by student development professionals for use with college students.

*Developing competence* intellectually, physically, and interpersonally is the first vector in Chickering's theory. As students enter this new environment they question whether they are able to succeed. Perceiving themselves as capable of handling the challenges of college leads them to engage more deeply in learning and to become more fully involved in campus experiences. Students with the resulting high levels of self-efficacy are more likely to persist when they face obstacles and therefore to achieve success. They experience a greater sense of well-being and develop greater confidence to try new things. As a result, they are also more likely to graduate.

There are four primary ways that college programming can help students develop competence. The first is by helping students become more aware of the strengths they bring with them into the university environment. Awareness of these strengths bolsters students' confidence to approach new tasks and persist when those tasks become difficult as students realize they already have assets they can capitalize on that have helped them succeed in their prior environments. The second approach is to give students timely, informative feedback that helps them build on their strengths. This type of feedback from professors as well as advisors and counselors enhances students' sense of competence because it targets specific actions they can take to succeed. The third approach is to teach students coping skills that will build their resilience and provide concrete strategies for facing the inevitable challenges of college life. Providing students with optimal challenges that stretch their capabilities, as well as providing them with appropriate choices along the way, further encourages the development of competence. When students have developed a sense of competence in all three areas – intellectual, physical, and interpersonal – they are able to navigate the academic demands of college while building successful relationships and staying healthy.

*Managing emotions* is another developmental trajectory in the college student experience. Becoming aware of one's own emotions and learning to control the negative emotions that interfere with achievement and successful relationships are the major tasks in this vector. Students learn to identify the emotions they are experiencing and learn how those emotions affect their relationships and their way of seeing the world. College programs that develop students' emotional intelligence help them resolve the tasks that are central to this vector: recognizing their own

emotional repertoire, expressing emotions appropriately, accurately identifying others' emotional responses, and managing complex interactions with others.

*Moving through autonomy toward interdependence* is the third vector in college students' development. Students new to the college environment may not yet have developed self-directedness; they may rely inappropriately on authority figures, parents, or other external sources for direction. As they move through this vector in the college years, they begin to recognize that they are capable of making their own choices. They begin to realize the options that are open to them, they become more self-sufficient, and they learn to make decisions. At the same time they develop a greater sense of their interdependence with others. They recognize that they are capable of meeting others' needs and that others have something to offer them as well. They learn that they are their own person, separate from their family yet at the same time connected to them in healthy ways. When college programs encourage students to partner with others to accomplish their goals, interdependence naturally develops among those students.

These first three vectors tend to develop simultaneously in the first two years of college. *Developing mature interpersonal relationships* tends to develop in the second and third years, as students learn to value others who are different from themselves. They develop healthy, equitable relationships characterized by mutual respect, good communication, and conflict resolution. College programs that encourage perspective taking help students become more understanding of differences, as they learn to put themselves in others' shoes. When such programs also teach students to see the strengths that exist in others, this can engender a greater awareness of others' uniqueness and enable students to resolve conflicts more effectively. Knowing how the other person sees the world provides clues to what he or she values, which enhances the ability to communicate effectively with that person.

*Establishing identity* also occurs at about the same time as students are developing mature relationships. Establishing identity involves being able to integrate the many facets of one's life experiences into a coherent sense of self, a task that often extends beyond the college years. Students who have established their identity are capable of actively listening to multiple perspectives and weighing those perspectives against relevant evidence as they make decisions. They feel comfortable in their own skin and balance the needs of others against their own needs. When students are exposed to a variety of perspectives and have the freedom to explore different viewpoints within the context of relationships with faculty and staff, they are better able to achieve a sense of identity. The balance of challenge and support is particularly crucial in this vector.

The last two vectors are interrelated and are rarely completed during the college years. *Developing purpose* is an ongoing task of meaning-making that provides students with a sense of direction and the energy to reach their goals. Research shows that the quality of student-faculty interactions can affect this search for meaning and purpose; when faculty communicate a belief in students' academic potential, hope is generated. Students with high levels of hope are then able to conceptualize their goals and are motivated to design specific strategies for reaching

those goals. As a result, research by Snyder, Lopez, and others has demonstrated that these students not only get higher grades but also are more likely to graduate. Student life staff and career counselors can also assist students as they face the task of developing purpose during college, by providing service learning opportunities, career advising, and leadership development programs.

*Developing integrity* is the final vector in college students' development. This journey begins in college but is rarely completed there. Students' tasks include developing a sense of wholeness, congruence, and authenticity that enables them to make sense of their lives. Students learn to clarify a set of core values and beliefs that are internally valid and consistent, which often involves exploring the connection between their values and their behaviors. Students begin to shift away from automatic thinking and unquestioned or dogmatic beliefs and move toward a conscious choice of their own values, while respecting the beliefs of others. They learn to behave in a manner that is congruent with their newly internalized value system. Successful development is more likely when students feel they are in a safe environment for exploring new ideas, interacting with people who are different from them, and gaining perspective on the values and beliefs they want to internalize as their own.

Throughout the college years there are types of experiences that tend to promote positive developmental change in students. Classroom learning environments that are engaging, that expose students to diverse people and ideas, that emphasize complex problem-solving, and provide students with timely informative feedback about their progress lay the foundation for this development. College programs outside the classroom that encourage student involvement, provide students with a sense of choice while requiring interaction with diverse people, and encourage reflective self-assessment complement the classroom experience and create a seamless learning environment that fosters healthy student development.

SEE ALSO: ► Academic achievement ► Career development

## Common Factors

Eric R. Benson and Stephen S. Illardi

*University of Kansas*

*Common factors*, also known as *non-specific factors*, refer to the general core components that are present across all forms of therapy regardless of theoretical orientation. These mutual elements account for the therapeutic change found in all treatments, above and beyond that which can be attributed to the technical elements that make a particular approach distinctly different. This equivalence in treatment efficacy was first discussed by Rosenweig in 1936, a point he emphasized by quoting the Dodo bird from *Alice in Wonderland*, "Everyone has won, and all must have prizes!" In 1975, Luborsky, Singer, and Luborsky performed a large-scale

review of the psychotherapy outcome literature, presenting initial support for the assertion that all psychotherapies are relatively uniform in terms of effectiveness. Alluding to Rosenweig's initial reference, Luborsky et al. dubbed their controversial conclusion as "The Dodo Verdict." Prior to The Dodo Verdict, the most notable researcher to develop a substantial body of work examining common factors was Jerome Frank. In his seminal book *Persuasion and Healing*, he outlined four core components that are present in all successful treatments. Though sometimes criticized for being too broad to measure, the elements identified by Frank continue to remain the benchmark for identifying commonalities across treatments. These four components are:

1. *An emotionally charged, confiding relationship with a helping person.* This component is often referred to as the *therapeutic relationship* or *therapeutic alliance*. It encompasses both therapist and client factors contributing to this relationship as well as the independent influence of the relationship in and of itself. Many psychologists believe that this is the most important condition needed to impel change. Specific examples of factors identified within this broader core component include both client and therapist attitudes and expectations. In the case of children, a therapeutic alliance with the parent has been found to have distinct contributions from the alliance with the child, including increased participation and fewer missed sessions.
2. *A healing setting.* The identified locale where a therapeutic encounter is to take place may serve a dual function. The first of these functions is an affirmation of the therapist's qualifications which may serve to strengthen client confidence regarding the therapist's abilities to help them meet their goals. The other purpose served by an identified setting is the provision of a designated safe environment where disclosure and instruction can occur without the client having to be concerned about being judged.
3. *A rationale, conceptual scheme, or myth.* The word *myth* is used because this rationale does not need to be fully understood or empirically proven. In order to be effective, the rationale needs only to provide an explanation that is plausible to the involved parties. This rationale is then used to guide treatment procedures.
4. *A prescribed ritual or procedure for resolving client symptoms.* The routine asked of the client helps to not only strengthen the therapeutic relationship but also inspires expectations of improvement. This latter outcome is credited as being the driving impetus behind the placebo-effect (see below). Additionally, the prescribed ritual offers opportunities in and outside the session for the client to practice skills and increase their confidence in being able to overcome their personal challenge.

In discussing the four aforementioned components, it is important to acknowledge that these factors do not necessarily exist independently. For instance, shared beliefs of the client and therapist, provided by the rationale, may strengthen the

therapeutic alliance. A concurrence of beliefs then increases the chance of client adherence to the therapeutic regimen that the rationale served to shape.

## **Demoralization**

Frank argued that the effectiveness of the aforementioned factors lay in their ability to counteract demoralization. This demoralization stemmed from an individual's perceived incompetence in attempting to master situations that they feel they should have the ability to manage on their own. Frank described demoralization as being marked by feelings of distress related to hopelessness, helplessness, and diminished self-esteem.

Some theorists believe the process of *remoralization* begins with the decision of the client to seek assistance, be it in the form of medicine, religious guidance, or therapy. This enlistment of an expert to help meet the desired goal of symptom relief marks an initial concession of faith in the rationale of a particular treatment. The therapist (or other expert) then furthers the process of remoralization through the mechanisms mentioned above. If these components are not achieved (e.g., the therapist fails to establish the relationship; the client, after learning more about it, loses faith in the rationale), then they may regress back into a state of demoralization. Other theorists have conceptualized remoralization as occurring through other processes which have established parallels to Frank's common factors. These include the enhancement of self-efficacy as described by social-cognitive theorists and goal-setting, pathways, and agency described by hope theorists.

## **Placebo-Effect and Religious Healing**

Frank extended his rationale beyond the curative effects of psychotherapy to explain the well-established actions of placebo drugs and religious healing. Frank cited the documented salubrious effects of inert substances and non-scientific rituals as added proof of the power of expectant trust and hope in a plausible rationale. Frank used his concept of common factors and remoralization to explain many of the studies showing the equivalent effects of these methods when compared to those that are more scientifically driven. It is poignant to note that Frank's application of remoralization theory to describe the effects of placebo does not indicate equivalence between placebo and treatment mechanisms or their possible outcomes. The theory of remoralization simply offers a rational explanation for the intriguing effects of this condition.

## **Support for Common Factors**

Perhaps the most prolific in garnering support for the existence of common factors across therapies, Bruce Wampold has accumulated a number of well-constructed

reviews of the literature comparing various psychotherapeutic approaches. In his 1997 meta-analytic review of comparative therapy studies, Wampold presents compelling evidence that the effect size for the comparison of psychotherapies is small at best (about 0.20). When taken into account with the large effect size found when comparing psychotherapy with no treatment (0.82) and the small-to-medium effect sizes of psychotherapy when compared to placebo (0.48) and placebo compared to no treatment (0.42), the effect size describing the differences between treatment outcomes is relatively insignificant. Though some evidence exists supporting the generalization of common factor findings to the treatment of specific disorders (e.g., depression), more work needs to be done in this area before conclusive results are available.

## Summary

Though there are noted exceptions of specific treatments that go beyond that which can be explained by common factors (e.g., cognitive-behavioral treatment for anxiety disorders), the equivalent outcomes of most treatments for the majority of conditions raise the question: Are specific techniques even needed at all? Because of the broad nature of these concepts, measurement difficulties, and disagreements as to what constitutes a common factor, this question may never be answered. Additionally, the answer may be more complex than a simple “yes” or “no” response. Future research may explore the relative contributions of common versus specific factors occurring along a continuum of severity. For instance, disorders with a high likelihood of spontaneous remission (e.g., mild depression, adjustment disorders) may be more amenable to common factors regardless of the specific procedure. However, disorders identified as having a low likelihood of spontaneous remission (e.g., obsessive-compulsive disorder, autism, substance dependence) may require specific techniques beyond the components common to all treatments.

SEE ALSO: ► Empirically-supported interventions ► Hope

## Compassion

Sherlyn Jimenez

*University of Connecticut*

In recent literature, *compassion* has been defined as being moved by the suffering of others such that one desires to relieve or make bearable that suffering. Compassion, at its core, is a social and relational emotion based on a sense of connectedness and concerned with the prevention, alleviation or elimination of suffering in others. Preliminary findings on compassion indicate that it may be related to positive psychological and physical outcomes as well as prosocial behavior and positive socialization. As a powerful motivation for individual transformation and societal

action, compassion is therefore a crucial emotion that merits further study. However, research on compassion has been scarce with existing research mostly focused on compassion fatigue. Although there is a significant body of literature on empathy, altruism, and prosocial behaviors, compassion itself has largely been ignored as a central psychological construct. At present, empirical data are lacking concerning the processes and mechanisms involved in compassion and the factors which promote compassion. As such, more research on this important topic is needed.

## **Differentiating Compassion from Sympathy, Pity, Empathy, Altruism, and Compassionate Love**

Because compassion has significant overlap with sympathy, pity, empathy, altruism and compassionate love, it is first necessary to distinguish compassion from these constructs. Compassion, sympathy, and pity once shared closely equivalent meanings – that of a sense of fellow-feeling which arouses tenderness and concern in light of the suffering of another. Pity has since come to connote feeling sorry for another, usually in downward comparison. Sympathy has been defined by Clark as a cognitive, emotional, or physical reaching out to others, consisting of empathy (role taking), sentiment (feeling) and display (behavioral response). This proposed definition of sympathy most closely corresponds with compassion. However, the word sympathy has similarly undergone a shift in meaning and connotation, and is now more commonly associated with gestures of condolence, a sentiment indicating a sense of commiseration with someone's sorrow but at a distance. Although sympathy still connotes a feeling of caring and being affected by the grief or suffering of another, it has lost the sense of direct engagement or understanding that the word compassion still exemplifies.

Empathy has been defined as the ability to discern or vicariously experience the emotional state of another being and as an affective response that stems from perceiving or understanding another's emotional state or condition. Empathy, encompassing such emotions as sympathy and compassion, involves an other-oriented emotional response elicited by the perceived need of another. However, Lazarus has previously argued that whereas compassion may be experienced when one comprehends and reacts to someone else in trouble by wanting to ameliorate the suffering, empathy is a capacity and a process rather than an emotional state. Lazarus distinguished empathy from compassion by noting that empathy is focused on sharing another's emotional state and occurs specifically in response to the suffering of someone while compassion is an other-directed emotion that may be generalized to include a behavioral stance or altruistic behavior. By itself, altruism has been defined as an action that is intended to benefit another. Batson expanded the definition of altruism by adding that it is a motivational state aimed at improving another's welfare. He proposed the empathy-altruism hypothesis which unites feeling (empathy) with behavior (altruism), positing that feeling empathy for a



person in need leads to increased altruistic behavior toward the other. While both the empathy-altruism hypothesis and compassion encompass empathic concern and altruistic motivation, there is a significant distinction: The empathy-altruism hypothesis does not make explicit an individual's sense of connection with others that is embodied in compassion.

Yet another term related to compassion is compassionate love, defined as an attitude toward another, containing feelings, thoughts, and behaviors that are focused on caring, concern, and tenderness and oriented toward supporting, helping, and understanding that person, particularly when that person is seen as suffering or in need. Underwood states that love brings in emotional and transcendent components which compassion alone leaves out, and that it captures a deeper investment of the self than altruism suggests. Accordingly, Underwood argues that compassionate love is the more encompassing construct because it not only includes aspects of empathy such as tenderness and caring, but also adds behavioral predispositions which occur independently of the specific target eliciting the experience. However, it is possible for compassion and love to exist independently of each other. There may be times when one feels compassionately toward another and yet not feel love. Conversely, one may feel love for another and yet not be presently inclined to feel compassionate towards that other. Thus, it may be more prudent not to conflate compassion and love but to see them as distinct though certainly related constructs.

In sum, compassion differs from the constructs of sympathy, pity, empathy, altruism and compassionate love in distinct ways. Empathy, for example, stops short of the will to action and effort that compassion encompasses. It is not enough to be empathically accurate and cognizant of another's pain since it is possible to acknowledge suffering and feel nothing for that person. Similarly, one may feel empathic concern but yet not be moved to ease the other's suffering. Further, one may engage in helping or altruistic behavior but lack feeling and sense of connectedness with the other. Compassion thus makes explicit the motivation and concern which stems from a sense of interdependence, and directs a response to alleviate or make bearable the other's suffering. Compassion, unlike empathy, is a deeper and deliberate participation in another's suffering which gives context and direction to a person's subsequent response to suffering.

## A Proposed Operationalized Definition of Compassion

Although various definitions of compassion exist, in order to study compassion, an operationalized definition is needed. By definition, compassion means to suffer with, to experience with or to feel with. In Hebrew, the word for compassion, *rachamin*, comes from *rechem*, or womb. Loosely translated, it is akin to a mother's feeling of intimate sharing and bond toward her child, whose pain, as an extension of herself, is also her own. Spiritual teachers have defined compassion as the wish for others to be free from suffering accompanied by a strong motivation to do

something about it. Specifically, it is an engagement with, and response to, the suffering of others, expressed through feelings of caring and interconnectedness, and arising when one opens oneself not only to another's suffering but one's own. Compassion has also been equated with action, a necessary outgrowth following awareness of one's interdependence with others. This definition of compassion is closely related to the Buddhist term for compassion, *karuna*, which translates as "compassionate action," with the intention to relieve and transform suffering and lighten sorrow.

Previously, Cassell proposed three requirements for compassion: (a) the suffering must be serious; (b) the suffering cannot be self-inflicted; and (c) one must be able to identify with the recipient's suffering. In other words, compassion requires an understanding of what the sufferer is experiencing. However, Cassell himself points out that certain people such as priests and monks are able to transcend these requirements of compassion as their ability to identify with the suffering of others is broader in scope. Moreover, withholding compassion from people whose suffering is perceived to be self-inflicted or avoidable would run counter to the moral principles of spiritual counselors and the ethical principles of the helping professions. One might conceive these conditional requirements as reflecting an underdeveloped or immature compassion which has yet to recognize that no one is exempt from suffering and thus, everyone is deserving of compassion, including oneself. A more fully developed compassion would be able to bridge the gap between self and other through awareness of everyone's shared humanity and a deep understanding of the universality of suffering.

From a multi-disciplinary perspective, compassion is defined as an interpersonal, relational and other-regarding phenomena consisting of an emotional and cognitive response to another's pain and need. Within psychology, Kanov and colleagues have proposed a definition of compassion that builds on the work of Clark on sympathy. This definition conceives of compassion as a dynamic process consisting of "noticing," "feeling," and "responding." As it stands, however, it does not include the sense of connectedness that is central to other definitions of compassion. Thus, "connecting" is added to this process with the underlying assumption that compassion arises from a feeling of shared humanity with others. Noticing may be described as being cognitively, physically or emotionally attuned or attentive to another person's suffering. It requires openness and receptivity, a certain mindful awareness of the feelings and emotional states of others as well as one's own. The feeling component is similar to empathic concern in that one is moved by, and feels connected with, the suffering of the other. Responding is the altruistic component of compassion, the behavioral motivation to relieve, ease, or make bearable the suffering of another. Connecting is the sense of "we-ness" and interdependence between self and other. Thus, compassion not only involves being able to notice, feel and respond to another's suffering but is necessarily undergirded by a feeling of connectedness with others. An operationalized definition of compassion is therefore proposed: compassion is a relational and interpersonal process arising from a sense of interconnectedness which promotes an awareness

of, and an emotional reaction to, another's suffering, leading to an intentional response to assuage or make bearable that suffering. Put more succinctly, compassion stems from a feeling of connectedness with others which makes it possible for one to notice, feel and respond to the suffering of others with care and concern.

## Possible Antecedents to Compassion

Compassion may arise in different ways. One factor that may enhance compassion is religious or spiritual practice. For example, mindfulness practice or contemplative life may promote compassion through its emphasis on acceptance and nonjudgmental behaviors and sense of shared humanity. Secure attachment might also promote compassion as might a sense of we-ness and ability to identify with the other. Finally, transformative experiences, either through spiritual practice or from suffering, may promote compassion through bringing about a sense of connectedness with others.

Religiosity has been associated with broader prosocial scope and concern, such as charity and willingness to help, with religious individuals reporting higher levels of prosocial behaviors community service, empathy, kindness and altruistic behavior. Other studies raise the question, however, of whether it is intrinsic religiosity or a sense of spirituality itself which is related to compassionate values and behavior. Chau and colleagues found that intrinsic religiosity was related to altruism while Saroglou and colleagues found that spirituality, as opposed to religiosity, extends prosocial concerns from one's network of acquaintances to all people.

Secure attachment has been suggested as another factor which allows for more empathic perception and response to other's needs, thus facilitating helping behavior. In several studies examining the relationship between compassionate feelings and attachment security, Mikulincer and colleagues found that dispositional and induced attachment security promoted compassionate feelings, tolerance of outgroup members and altruistic behaviors, such as volunteering. Eisenberg had previously found that children who are highly empathic tended to have mothers who are empathic, warm and comforting, which might suggest that in addition to secure attachment, modeling and social learning may be factors that influence the development of compassion.

Perceived similarity of experience or common fate might also give rise to a sense of we-ness, a sense of belonging to a common group that can lead to increased perspective-taking. For example, assuming a role of disabled person has been found to lead to more prosocial behavior while inducing a "common group identity" increased helping toward formerly considered outgroup members. Furthermore, feeling empathy for a member of stigmatized group may improve attitude toward the group as a whole which in turn may facilitate generalized empathy leading to more prosocial behavior.

Finally, compassion may arise in the aftermath of a stressful or traumatic life event by potentially inducing a heightened sense of connectedness through an

understanding of shared experience and sensitivity to the suffering of others. Lewin remarked that compassion is a response to a “human vulnerability” – that a person who has suffered understands what it means to suffer. However, one must first open to one’s own suffering for only when suffering is felt and experienced fully is one moved and transformed. One study on stroke victims found that 9% of the participants believed that as a result of their experience, they became more compassionate. Previous research on empathy suggests that having had a highly distressful childhood experience can heighten empathic response. Other studies have found that rape victims were more empathetic to others in general and toward other rape victims in particular, and that people who knew a rape victim were not only more empathetic toward other rape victims but also toward victims of other traumatic events. Research on chronically ill children also suggests that chronic illness may produce more sophisticated altruistic behavior, empathic responses and perspective taking.

## **Compassion and its Psychological and Physical Correlates**

Because research on the relationship between compassion and psychological and physical health has only recently commenced, findings are preliminary and limited in scope. Nonetheless, in a review of altruistic emotions and behaviors, Post found that being emotionally and behaviorally compassionate was correlated with psychological well-being, health and longevity. Self-compassion, which consists of self-kindness, common humanity and mindfulness, has also been found to be related to increased psychological well-being and adaptive functioning. In one of the few studies directly related to compassion, Steffen and Masters examined the relationship between intrinsic religiosity, well-being and compassionate attitudes and behaviors in college students at a religious university. Their findings suggest that compassionate attitudes, which were assessed through a four-item measure, mediate the relationships between intrinsic religiosity and lowered depressive symptoms and perceived stress. Similarly, a pilot study on compassionate mind training found reductions in depression and anxiety as well as increased ability to self-soothe in six patients suffering from chronic mood disorders. Enhanced mood and perceived greater closeness with others were also found to be associated with experience of compassionate love in a cross-sectional retrospective study asking participants to recall an experience of compassionate love. With regards to physical correlates of compassion, brain imaging studies on compassion and meditation have linked compassion with left prefrontal activity and positive affect. More recently, a functional magnetic resonance imaging study appears to indicate an intersubjective representation of pain in the human brain. This study found that observers’ brain activation was correlated with the perceived intensity of observed pain and with the observers’ own self-rated empathy.

## Methodological Limitations

Since research on compassion is still in its infancy, significant methodological limitations exist such as insufficient sample size, lack of longitudinal data and absence of a comparison or control group. Additionally, varying definitions and measures of compassion, which may or may not adequately assess the construct of compassion, limit the generalizability of the findings.

## Future Studies

Preliminary research on compassion suggests the potential value of studying compassion and its relationship to physical and mental health outcomes as well as social outcomes. To this end, previous research on related constructs such as empathy, altruism, and prosocial behaviors might be useful in informing the direction of future research. The increasing interest in the construct of compassion also points to a need for a well-validated measure based on a working definition of compassion. Subsequently, the mechanisms and processes involved in compassion will need to be explored further. Additionally, empirical support for the hypothesized antecedents of compassion will have to be established. For example, philosophical and religious literature has consistently pointed to compassion as a possible outcome of suffering and yet psychological research has only indirectly examined this relationship.

Since compassion has been linked with positive affect, another possible area of research might be to determine the relationship between compassion and depression, which is characterized by diminished positive affect. It has also been suggested that depression might be a form of compassion deficit. That is, instead of being other-focused, depression tends to be self-focused. Interventions which promote cultivation of compassion towards others might mitigate this self-focused attention that is a common feature of depression. As compassion might also foster prosocial behaviors and sense of civic responsibility, it might be of interest to determine the specific factors which promote and sustain compassion. Future studies could examine whether self-reported compassion translates into instrumental behaviors such as community involvement and altruistic and helping behaviors. A strong relationship between compassion and prosocial behaviors would provide support that people with high levels of compassion are motivated to action. Lastly, further studies on the neurobiological correlates of compassion are needed to determine the specific effects of compassion on physical health, particularly with regard to stress and coping.

SEE ALSO: ► Altruism ► Civic responsibility and virtues ► Compassion  
► Empathy ► Self-compassion ► Suffering

## Complementary and Alternative Medicine

Søren Ventegodt<sup>a</sup> and Joav Merrick<sup>b</sup>

<sup>a</sup>Nordic School of Holistic Medicine, Research Clinic for Holistic Medicine and Inter-University College, Graz; <sup>b</sup>National Institute of Child Health and Human Development, Israel

To define *complementary and alternative medicine* (CAM) one must look at the definitions of biomedicine, holistic medicine, alternative medicine, integrative medicine, and scientific medicine.

Biomedicine involves using chemicals (medical drugs) as a cure. Holistic medicine is using rehabilitation of the patient's wholeness (called holistic healing or salutogenesis) as a cure. Alternative medicine is using whatever method is found helpful (and is not in use already by biomedical drugs), such as the medical systems of pre-modern cultures like acupuncture (China) or peyote (America). Integrative medicine is integrating the art and science of biomedicine and alternative medicine. Scientific medicine is built on scientific theory and documentations (evidence-based medicine). Integrative, scientific medicine is only integrating the scientific medical systems.

So holistic medicine can be scientific (i.e., short-term psychodynamic therapy or nonscientific (i.e., aura-healing); it can be scientific and biomedical (treatment of post-traumatic stress) or scientific and alternative (holistic short-term psychodynamic therapy complemented with bodywork = "clinical holistic medicine"). Alternative medicine can be holistic or nonholistic, scientific or art. Most people seem to agree to define complementary and alternative medicine as *holistic health care*.

Holistic health care is defined as the art and science of healing the whole person – body, mind and spirit – by integrating conventional and alternative therapies to prevent and treat disease in order to promote optimal health (from the constitution of the International Society of Holistic Health).

In Europe, 40 universities and academic institutions have created a European Union Master degree in complementary, psychosocial and integrated health sciences. The fundamental educational program for this course can be briefly explained in six issues of major importance for CAM:

1. Fundamentals of salutogenesis, health promotion and individual promotion of health guided by resources.
2. Fundamentals of depth psychology and therapeutic relationship.
3. Working and writing scientifically in complementary medicine and integrated health.
4. Fundamentals of regulatory biology, paradigms and scientific backgrounds of regulatory methods.
5. Introduction of regulatory methods, systematics, description and current research.
6. Comparison and integration of complementary medical methods, humanity and medical science.

CAM often uses one or more of the five central, holistic principles of healing the whole person:

1. *The principle of salutogenesis*: the whole person must be healed (existential healing), not only a part of the person. This is done by recovering the sense of coherence, character and purpose of life of the person.
2. *The similarity principle*: only by reminding the patient (or his body, mind or soul) of what made him ill, can the patient be cured. The reason for this is that the earlier wound/trauma(s) live in the subconscious (or body-mind).
3. *The Hering law of cure* (Constantine Hering, 1800–1880): that you will get well in the opposite order of the way you got ill.
4. *The principle of resources*: only when you are getting the holding/care and support you did not get when you became ill, can you be healed from the old wound.
5. *The principle of using as little force as possible* (*primum non nocere* or “first do no harm”), because since Hippocrates (460–377 BCE; “Declare the past, diagnose the present, foretell the future; practice these acts. As to diseases, make a habit of two things – to help, or at least to do no harm” [Jones, 1923]), it has been paramount not to harm the patient or run a risk with the patient’s life or health.

In the United States complementary medicine is now used more than biomedicine and its use is doubling every 10 years in most Western countries making it most likely to be the medicine of this century. We recommend that complementary medicine become scientific and that governments support the development of theory and documentation of its effect.

SEE ALSO: ► Existential psychology ► Health psychology  
► Holistic healing

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## Confidence

Rosabeth Moss Kanter  
*Harvard Business School*

*Confidence* consists of positive expectations for favorable outcomes in specific situations. Although often used interchangeably with *optimism* in popular discourse,

confidence is not a character trait nor a global cognitive predisposition. Rather than an attribute of individuals, it is a response to situations; degrees of confidence vary with accumulated experience and are related to the immediate context. While individuals vary in character, mood, and cognitive tendencies, confidence is not a mental construct, solely dependent on what people generally believe. People interpret specific events based on observations of the behavior of others around them and use these to predict the future likelihood of success.

The level of confidence helps determine the willingness to invest time, money, reputation, emotional energy, or other resources – or to withhold or hedge investment. This investment, or its absence, shapes the ability to perform. Judgments that underlie confidence can be made at many system levels. People can have confidence in themselves (self-confidence), in other people (thus influencing the others' confidence), or in larger system units, such as organizations, institutions, or nations. The foundation for confidence stems from the quantity of information about strengths and weaknesses and the ability to take corrective action (accountability); the quality of support people provide for one another (collaboration); and the perception of opportunities to take positive action, however small (initiative).<sup>1</sup>

There is a mutually reinforcing link between confidence and performance. Success creates confidence, and confidence makes it easier to succeed. People who believe they are likely to win are likely to put in the extra effort at difficult moments to ensure that victory. Similarly, failure feeds on itself. As performance starts running on a positive or a negative path, the momentum can be hard to stop. This is encapsulated in slogans. When people or groups are “on a roll,” they go “from strength to strength.” “Losers,” on the other hand, seem doomed to always lose, because no one believes in them, no one invests in them, no one helps them improve. That's how the rich get richer, the poor get poorer – or the sick get sicker, the vulnerable become victims, and physical surroundings start looking run-down because momentum is running down.

Confidence is a sweet spot between arrogance or complacency (overconfidence) and despair or hopelessness (underconfidence). At both extremes, people are less likely to put in the effort required for high performance – either because they feel entitled to success without having to work for it or make difficult changes to get it, or because they believe that nothing they do will make a difference, sometimes due to “learned helplessness.”<sup>2</sup> Arrogance involves the failure to see flaws or weaknesses and despair the failure to acknowledge strengths. Overconfidence leads people to overshoot, to overbuild, to become irrationally exuberant or delusionally optimistic, and to assume they are invulnerable.<sup>3</sup> Underconfidence leads people to underinvest, to underinnovate, and to assume that everything is stacked against them, so there's no point in trying.

Confidence is based on observations and assumptions about whether conditions seem to be improving or deteriorating, about whether the game can be won or will inevitably be lost. Patterns and trends are imposed even on events that are random, such as games of chance; gamblers might believe that when they hold a few good hands of cards, that they must be “hot,” and that the next hands will



be equally good. And for nonrandom activities, where human effort and skill make a difference, success and failure easily become self-fulfilling prophecies.<sup>4</sup>

Failure and success are not episodes; they are trajectories. The next decision or performance episode is shaped by what happened in the past as well as by an assessment of the current situation. The same \$10,000 in someone's bank account can make him feel rich and getting richer if he had only \$5,000 the day before and \$1,000 the day before that, or poor and getting poorer if he had \$50,000 the previous day and \$100,000 two days earlier. History and context shape interpretations and expectations.

Expectations affect outcomes. People who assume that they will succeed persist and persevere even in the face of obstacles or setbacks; at the individual level, confidence is related to resilience. People in whom others have confidence, who are assumed to be successful, can readily attract the investment that ensures their success. But if people who must invest their time or resources in an enterprise believe that it is failing, they withhold effort and investment, and that deepens the state of decline. Self-fueling cycles of advantage or disadvantage can become growth engines or death spirals.<sup>5</sup> It is sometimes hard to disentangle cause and effect. Previous wins can create enthusiasm for high performance, which helps produce victory, and losses can cause poor performance as much as poor performance can cause the next loss.

Messages about confidence are sent at many levels. This is easy to see in sports matches. On the playing field, confidence is embodied in whether players feel they can count on themselves and count on other members of their team to do their part. Behind-the-scenes, confidence stems from a reliance on leaders and the system itself – the culture of the surrounding organization – to provide resources and support that make it possible to play the game well. Further beyond, confidence on the part of investors (or customers, consumers, and fans) shapes their decisions about whether they will supply what is needed for success to continue – or not – into the future, including money, time, talent, attention, or loyalty. All of these levels are intertwined and reinforce each other. The confidence of fans shapes the emotions of players. The confidence of players shapes outcomes for investors.

Confidence underlies the performance of individuals, teams, businesses, schools, economies, and nations.<sup>6</sup> Powerful historical, economic, and organizational forces accumulate to shape the likelihood of success in the next round of performance. The fundamental task of leaders is to develop confidence in advance of victory, in order to attract the investments that make victory possible – money, talent, support, loyalty, attention, effort, or people's best thinking.

## Notes

- 1 See Rosabeth Moss Kanter (2004). *Confidence: How winning streaks & losing streaks begin & end*. New York: Crown.

- 2 Peterson, C., Maier, S. F., & Seligman, M. E. P. (1993). *Learned helplessness*. New York: Oxford University Press.
- 3 Lovallo, D., & Kahneman, D. (2003). Delusions of success: How optimism undermines executives' decisions. *Harvard Business Review*, July: 56–63.
- 4 Although the idea has roots in the work of earlier sociologists, Robert K. Merton gave shape to the concept of the self-fulfilling prophecy, which he introduced in an article in the *Antioch Review* in 1948 and refined in his book, *Social theory and social structure* (Glencoe, Illinois: Free Press, 1949).
- 5 A sampling of the many views of self-fueling spirals: Lindsley, D. H., Brass, D. J., & Thomas, J. B. (1995). "Efficacy-performance spirals: A multilevel perspective," *Academy of Management Review*, 20 (3), 645–670. Snook, S. (2005) *Winning and losing streaks in professional football: A study of self-fueling spirals in team effectiveness*, unpublished Manuscript, Harvard University Department of Psychology. Cameron, K. S., Dutton, J. E., & Quinn R. H. (Eds.) (2003). *Positive organizational scholarship*. San Francisco: Berrett-Koehler.
- 6 Kanter, *Confidence*, ch. 10.

## Conscientiousness

Michelle N. Shiota

*Arizona State University*

*Conscientiousness* is one of the "Big Five" dimensions of human personality uncovered by factor analyses of trait ratings in several languages and cultures. Benet-Martinez and John (1998) have aptly defined Conscientiousness as "socially prescribed impulse control that facilitates task- and goal-directed behavior" (p. 730). Like the other Big Five constructs, Conscientiousness is a higher-order statistical factor reflecting a pattern of covariance among more specific traits, in this case traits involving a person's efficacy, responsibility, and reliability. Conscientiousness is written with a capital C to emphasize its status as a statistical factor, and researchers will typically refer to Conscientiousness as a "factor" of human personality, rather than a "trait." Conscientiousness appears to be a lifelong disposition, with individuals' level of Conscientiousness relative to others remaining consistent throughout much of the lifespan. However, on average people do become more Conscientious as they get older, peaking around middle age.

## Measures of Conscientiousness

Like the other Big Five traits, Conscientiousness is typically measured using questionnaires, in which the respondent states his or her level of agreement with items describing the self or another target person. Because the Big Five constructs were initially derived from studies examining correlations among trait adjectives rated in this way, the items on Big Five questionnaires help to convey the content of

**Box 2.** Sample Conscientiousness Items from the Big Five Inventory.

*I see myself as someone who . . .*

- does a thorough job
- can be somewhat careless (reverse scored)
- is a reliable worker
- perseveres until the task is finished
- makes plans and follows through with them
- is easily distracted (reverse scored)

each construct. The “gold standard” Big Five instrument is Costa and McCrae’s NEO Personality Inventory – Revised (NEO-PI-R), in which respondents rate 240 single-word adjectives dichotomously as true or not true of the target. Scores for each factor are computed using scoring weights presented in the NEO-PI-R manual. The Conscientiousness scale of the NEO-PI-R has six 8-item subscales, or facets: Competence, Order, Dutifulness, Achievement Striving, Self-Discipline, and Deliberation. John, Kentle, and Donahue’s Big Five Inventory, a 44-item questionnaire derived from the NEO-PI-R adjectives, but framing each in a longer phrase and using a 5-point response scale anchored at 1 (*disagree strongly*) and 5 (*agree strongly*), is also frequently used by personality and social psychology researchers. Sample Conscientiousness items from the Big Five Inventory are shown in Box 2.

Conscientiousness can also be assessed with other instruments widely used in personality and clinical research, such as the Adjective Check List and the California Q-set – a measure in which participants must fit 100 cards with personality descriptors into a bell-shaped distribution, reflecting agreement with each card relative to the others. However, some of the California Q-set items used to rate Conscientiousness may not reflect the construct well relative to other instruments; for example, the descriptors “interested in the opposite sex” and “enjoys sensuous experiences” are two of those taken to indicate low Conscientiousness. Questionnaire measures of Conscientiousness are typically used as self-report instruments, but high agreement between self-ratings and ratings by close others, such as spouses, romantic partners, and friends, suggests that people can accurately report their own Conscientiousness, and that Conscientiousness is consistently manifested in behavior observed by others.

## Implications of Conscientiousness

Unfortunately, less is known about the correlates of Conscientiousness than is true of the other Big Five factors. One very consistent finding, however, is that high Conscientiousness predicts persistence, performance, and success in education and

work. Highly Conscientious people study harder, get better grades throughout schooling, show stronger work motivation and job performance, and generally perform better in their professional lives than those low on Conscientiousness.

Although studies tend to emphasize the role of Extraversion and Neuroticism in predicting psychological well-being (typically defined as high positive affect, low negative affect, and high life satisfaction), Conscientiousness does independently predict well-being after controlling for other Big Five factors. Specifically, people high on Conscientiousness report greater experience of positive emotions associated with accomplishment and reward acquisition, such as anticipatory enthusiasm, contentment, and pride, but not positive emotions associated with close relationships or information gathering and processing.

Highly Conscientious people tend to be healthier and longer lived than less Conscientious folk, presumably because Conscientious people take fewer risks and better care of themselves. In terms of psychopathology, however, extremely high Conscientiousness is associated with higher scores on measures of compulsive personality disorder.

## **Future Directions**

After decades spent documenting the validity of the Big Five constructs and the reliability of instruments used in their measurement, researchers have turned in recent years to investigating the underlying factors influencing the Big Five personality factors. Because individual differences in the Big Five seem to appear early in life, and remain consistent over the lifespan, genetic and other biological markers are of particular interest. Studies aimed at assessing the heritability of Conscientiousness have found fairly consistent results. In several studies with samples of both identical and fraternal twins, heritability has been estimated at around 40–45% of variance in this disposition, with little effect of shared environment (e.g., family, school), and the remaining variance attributed to unshared environment (environmental influences that differed between the twins). These findings suggest a strong genetic component underlying dispositional Conscientiousness, although studies have not yet suggested particular genetic mechanisms.

So far, few studies have sought to identify neurological or other biological markers of dispositional Conscientiousness. Studies showing a correlation between Conscientiousness and neuropsychological tests of effortful control suggest, however, that Conscientiousness may be associated with greater activity in the pre-frontal cortex, an area of the brain that supports impulse inhibition, planning, concentration, and strategy. More research investigating genetic and other biological factors in Conscientiousness can be expected in the next decade. Because of the emerging interest in the biological markers of Conscientiousness, researchers are also beginning to examine evidence of this factor in other mammals, considering the evolutionary origin of this factor and its importance in mammalian survival and reproductive fitness.

SEE ALSO: ► Five factor model ► Personal responsibility

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## Consciousness

Barbara Kerr

University of Kansas

The derivation of the word *consciousness* is “to know along with.” *Consciousness* is most commonly used by psychologists to refer to the internal experience of self that develops in humans around the age of three years. In common parlance, consciousness is most often considered synonymous with being awake. However, advances in medical technology have made it possible for people in vegetative states to be “awake” without being responsive to external stimuli, and research with patients under anesthesia has shown that it is possible to be conscious, or aware of sounds and conversations around them without being awake. Therefore, even the ordinary understanding of the term has become muddled. Once believed to be purely the province of human beings, consciousness as self-awareness is now thought to be a characteristic of a number of other species. A common test of conscious self-awareness is to paint a spot on the forehead of a human child, a chimpanzee, an ape, or a monkey, and then present a mirror. Three-year-old humans, chimpanzees, and most of the great apes will recognize themselves in the mirror, and attempt to wipe off the spot. Monkeys, however, as well as dogs, cats, and most other creatures considered “intelligent” will not. On the other hand, there is more controversial evidence that dolphins, whales, and grey parrots may also have some form of self-awareness based on these kinds of experiments.

Throughout history, people have speculated about the location of consciousness. Some societies believed consciousness resided in the heart, some the stomach, but most have located consciousness in the head. Eastern religions held that consciousness emanated from the “eye” in the forehead, from the sixth chakra, or in the one neural bundle in the brain that is singular rather than duplicated on each side, the pineal gland. Descartes also believed that the pineal gland was the seat of the soul. Split-brain studies, in which one side of the brain is separated from the other by severing the connecting corpus callosum (an operation done to prevent life threatening seizures), have shown, however, that consciousness is distributed across the hemispheres. In addition, neuroimaging studies do not point to any particular location as the place from which consciousness derives. It may be, therefore,

that consciousness is a process rather than a place. Francis Crick and his colleagues have developed a theory of the process of consciousness that depends on a form of short-term memory and also on a form of serial attentional mechanism. This attentional mechanism helps sets of the relevant neurons to fire in a coherent semi-oscillatory way, at about a frequency of 40–70 Hz, so that a temporary global unity is imposed on neurons in many different parts of the brain.

The dominance of behaviorism in the twentieth century impeded the study of consciousness, because it was considered too subjective to be investigated, a “black box” that could not yield to accurate observation. These barriers held until cognitive scientists and philosophers at last challenged the idea that consciousness could not be studied rigorously. The consciousness controversy began in earnest in 1994, with David Chalmers’ challenge to philosophers, psychologists, neurophysiologists, and anthropologists to begin in earnest to study the basic question, “What is consciousness?” Until that point, most research on consciousness explored what he called “the easy problems”: that is, the quest to understand the neural correlates of phenomenal consciousness. However, new methodologies and findings in neuroscience and artificial intelligence changed the focus of the problem to what Chalmers called the “hard problem” – that is, to explain how subjective experience arises from the objective activity of brain cells. Nevertheless, most scientists seem to feel safer with the easy problems and leave the hard problems to philosophers. Stephen Pinker went so far as to suggest that the mind is a computer made of meat and Francis Crick suggested that with advancing technologies, consciousness would be revealed as material in nature just as he and his colleagues revealed the chemical basis of heredity. Antonio Damasio pioneered the imaging of the brain through functional magnetic resonance imaging (fMRI) and proposed that emotion and cognition interact to produce consciousness. In the book, *The Feeling of What Happens*, he showed how the mind/body division that had been the basis of medicine and psychology was a false dichotomy.

Nevertheless, there are scholars such as Susan Blackmore who insist that consciousness is irreducible; that no matter how much progress is made in understanding the mechanisms of awareness, there will still remain a mystery that cannot be resolved because of the impossibility of entering into others’ subjectivities. The scholars of “nonlocality” and quantum theories such as Dean Radin claim that this impossible threshold has and can be breached, and that the hard problem will be solved by a completely new paradigm, not only in psychology, but in physics. Needless to say, those who would enter this controversy must be prepared to be open in mind and rigorous in method.

Many psychologists and philosophers have attempted to understand the various states of consciousness. In a case of an idea that was truly before its time, Roland Fischer in the journal *Science* in 1971 proposed a “cartography” of ecstatic and meditative states. His breakthrough was to conceptualize all states of consciousness on a continuum of arousal states ranging from the lowest arousal states (sleep – dreaming – meditation) through rational, or ordinary consciousness to higher arousal states (excitation – ecstasy – Samadhi). Parallel to this continuum were

found Electroencephalogram states ranging from dominant alpha to dominant beta to dominant theta states. Also parallel to changes in arousal were changes in one's sense of one's relationship to the world outside one's skin. Fischer conceptualized this continuum as one of subject/object differentiation, with clearest differentiation at rational state, where one feels completely separate from objects around one and with complete fusion at the both the highest and lowest ends of the continuum, where one feels completely fused, "at one" with the universe.

Recently, however, some advances in the study of consciousness have made it possible to refine and expand his cartography. Charles Tart and Imants Baruss, most notably, provided a means of understanding the brain's electrical activity, the physiological correlates, and the phenomenology of different states of consciousness. New information about sleep multiplies the possible consciousness states. Certainly the *flow* state described by Mihaly Csikszentmihalyi needs to be inserted in the continuum. Flow is the state of consciousness during creative activity when an individual is working at the peak of his or her capacity, feels challenged and yet just competent enough to meet the challenge, when time seems to stand still and the work seems to flow out and through the creating person. Studies of all of the other states including dreaming, hypnosis, meditation, relaxation, excitement, ecstatic states, and transcendent states are now multiplying as these become acceptable topics for study.

Anthropologists have also entered into the conversation about consciousness, taking particular interest in the ways in which human societies understand and use a variety of consciousness states. Michael Winkelman traces the history of the altering of consciousness in human societies and describes the "neural ecology" of shamanic consciousness. The seeking of altered states of consciousness is a universal characteristic of human beings. The capacity to alter consciousness, he says, and the trance that results between healer and patient, is the means by which shamanic healing occurs. Shamans alter their own consciousness as well as influence others toward altered states. They are trained in rituals and ceremonies of the culture, but are expected to be unpredictable, entering mystical states at their own time and place. They are free to seek visions and to tell of those visions; most of their recounts are valued highly by the community.

Only when societies are organized as agricultural towns do the shamans lose status. In these societies, a priest class emerges. Unlike the shaman, the priest reserves intercessory prayer for themselves, and those who "freelance" as mystics, healers, soothsayers, or sages are in danger. According to Winkelman, the rise of the priest class seems to be followed promptly by the persecution of shamans – as witches.

In positive psychology, discussions about consciousness most often take place within the study of spiritual intelligence. Most people who have attempted to define spiritual intelligence, including Robert Emmons and Kathleen Noble, have referred in some part to the capacity to attain different or higher levels of consciousness. Barbara Kerr claims that that ability to deliberately alter consciousness and to manage consciousness states is the *sine qua non* of spiritual intelligence.

Not only shamans, but great healers, teachers, and leaders seem to have this ability not only to alter their own consciousness, but to induce trance states, dreams, flow states, and ecstatic states in others. It is likely that positive psychologists will continue to study these altered states as well as the vehicles used to attain them, because it is these states that seem to be responsible for some of the highest attainments of the human mind, such as creativity, intuition, and enlightenment.

SEE ALSO: ► Complementary and alternative medicine ► Flow  
► Functional MRI ► Neurobiology

## Constructivism

Jack J. Bauer and Michael S. Perciful  
*University of Dayton*

*Constructivism* in psychology refers to the idea that people construct, rather than absorb, knowledge. Constructivism is primarily an epistemology – that is, a perspective on what knowledge is, what knowledge does, and how knowledge develops. As such, constructivism has profound implications for the study of psychology.

### Key Features of Constructivism

Constructivism embodies a range of epistemological perspectives but can be viewed generally as follows: All meaning emerges only as people construct knowledge in specific contexts. Knowledge of something does not emanate from the thing itself with a prepackaged (*a priori*) meaning already intact, as in the notion of a radio station broadcasting the same sounds to everyone. The constructivist view is that people interpret things and events to the degrees and in ways afforded by the interpretive abilities of people and their (notably social) contexts at particular times. As such, constructivism maintains that all knowledge is relative to people and their contexts. Thus constructivism opposes essentialism, which is the notion that things, people, ideas, etc. have essential and meaningful qualities that transcend the relativity of context-limited interpretations.

The proposition that all meanings are constructed can lead to the conclusion that nothing truly exists. However, many if not most constructivists stop short of making claims about ontology (that is, on the nature of existence or being). For example, radical constructivist Ernst von Glasersfeld claims that statements positing a true nature of existence (such as the statement “nothing exists”) run contrary to the principles of constructivism, which is that knowledge is relative to human context. What matters for understanding and adapting in everyday life is how we think about things, not the true or false nature of things.



Two key features of constructivism require elaboration at this point: self-organization and context. The two share a dynamic relationship. Constructivists in the social sciences and humanities view knowledge as generated by self-organizing, organismic systems. Individual organisms (for example, people) construct knowledge in contexts. These individual organisms, themselves systems and contexts, are also systems that include organisms – as in society’s containing individuals. The organism interprets actions in various ways (from sensations to thoughts), drawing upon cues from the present and previously experienced contexts. The organism then adapts accordingly, which subsequently changes the context. The organism and context remain in a state of mutual adaptation until equilibrium is established. However, the definitions of equilibrium and of the entire process itself are matters of how the system is interpreted or framed. For example, you might say a person eats until full, which represents equilibrium. But this is equilibrium only if you take the person-eating sequence as the frame of action; if the frame is broader, like the person’s biological life span, then equilibrium is not reached until the person’s death. Thus the process of self-organization depends on the context, and the context is shaped by its organism’s self-organization – and the view of this entire scenario is relative to the viewer’s purposes and framing of the system in question.

As for context, in a broad sense, constructivists consider physical and psychosocial factors. Constructivism can be found throughout the physical sciences and technologies – for example, systems theories, neuroscience, cybernetics, biofeedback, artificial intelligence, feedback and feed-forward loops, “smart” household appliances, and the Internet. Constructivism in each these areas deals with self-organizing systems (not necessarily human) whose function and processing of information depends on dynamic contexts. These fields and products employ the ideas of constructivism at least implicitly and often explicitly.

In the fields of psychology and social sciences, the primary context of constructivism is social. The psychological perspective is that nothing presents the individual person with greater opportunities for generating knowledge than does interacting with others. The terms *social constructivism* and *social constructionism* are used to represent the idea that social interaction is a dominant factor in everyday knowledge construction. (Both social constructivism and social constructionism imply largely the same epistemology.) Here the social context can be interpersonal, group-based, or cultural, such that different social contexts at each of these levels affect how individuals and collectives interpret meaning. Furthermore, time plays an important role in social constructivism, as human contexts are dynamic processes and are inextricable from social history.

## A Much Abridged History of Constructivism

While the popularity of constructivism in the sciences and humanities rose considerably in the past half century, tenets of constructivism can be found some

2500 years ago in Greece, India, and China. In India, the Upanishads warned of the hazards of mistaking one's thoughts for an ultimate reality, while the Buddha added that the subjective and highly impressionable mind is what creates the self. In China, the Tao Te Ching opens with, "Existence is beyond the power of words to define" (Brynner trans., 1944/1972, p. 31). In Greece, Heraclitus claimed that permanence is illusory and that all meaning is relative to context. Similarly, the sophists espoused the relativity of knowledge, as when Gorgias said that absolutes cannot be comprehended (and went beyond mainstream constructivism to claim that, therefore, nothing exists).

Move to almost 2000 years later, in the wake of the Renaissance, to the putative founders of modern, Western philosophy and science. Here a division emerges between empiricism, which bases knowledge in sensations and actions, and rationalism, which does not. Contemporary constructivism has roots in both, but positive psychology has stronger ties to empiricism, so such thinkers will be showcased here. Francis Bacon (1561–1626) claimed that the mind cannot be trusted in pursuit of truth, that we can only use what we perceive with our senses to know the world, and that such knowledge should be built upon an inductive, scientific method of observation. George Berkeley (1685–1753) went a step further (and into ontology), stating, "to be is to be perceived" – that is, perception creates existence. Such ideas emerged within a millennium of cultural history that increasingly valued the roles of an empirical foundation for knowledge and the individual's interpretation of experience.

The first half of the twentieth century saw the rise of phenomenology, structural linguistics, modern hermeneutics, and existentialism – each of which helped establish constructivist ideas in the academic and popular mindset. By 1966, Peter Berger and Thomas Luckmann's *The Social Construction of Reality* was poised to become a constructivist manifesto for the social sciences. Finally, postmodernism has relied heavily on and has extended the basic ideas of constructivism in more radical ways, some of which have facilitated the aims of scientific psychology, and some of which have not (see below).

## **Constructivism in Psychology**

Constructivist philosophy left its mark on the new science of psychology in the late nineteenth century. Franz Brentano emphasized the system of a person constructing meaning within a dynamic context, all together constituting a "mental act." Hans Vaihinger's "As if" philosophy stated that people construct fictions of reality that people use to organize and adapt to their world as if those fictions were objectively true. William James and John Dewey championed a pragmatist philosophy that emphasized the relativity of interpretations and the utility in studying them empirically. Such ideas fortified the snowballing of constructivism, especially in the United States, where positivism might otherwise have ruled supreme (see below).

Developmental psychology has a long history of constructivism. Jean Piaget is commonly viewed as a seminal figure in establishing constructivism in psychological science. Theories of cognitive development generally claim that thoughts are rooted in actions and sensations and that things gain their meaning from interpretation. Whereas these ideas had existed before Piaget's work (for example, in the work of James Mark Baldwin), Piaget couched these ideas in terms amenable to empirical study. Lev Vygotsky, whose work would not be discovered by mainstream psychology in the US and Western Europe until some 30 years after his death, also viewed knowledge as constructed but emphasized the social context. Contemporary Vygotskian approaches emphasize how socially constructed knowledge mediates action. Systems theories of development – such as those of motor skills, family, peers, schools, attachment, intimacy, identity, coping, delinquency, and addiction – emerged throughout the latter portion of last century, all pointing to self-organizing systems of knowledge that emerge and adapt over time.

Constructivism has also greatly influenced theories and research in the areas of personality, social, developmental, cognitive, and clinical psychology. Alfred Adler adopted Vaihinger's idea of fictions in his individual psychology. George Kelly's theory of personal constructs is explicitly constructivist. Humanistic and existentialist theorists like Rollo May, Carl Rogers, and Abraham Maslow encouraged therapists and researchers to study how individuals construct meaning in their interpersonal and cultural contexts. Erik Erikson outlined how personalities develop according to the ways that individuals adapt to their own interpretations of their roles in interpersonal, cultural, and even historical contexts.

Empirical research over the past century has increasingly focused on cultural and other contextual differences as well as on the individual's subjective interpretations of and adaptation to life events. On these fronts, constructivism has found a home in narrative psychology, and notably the scientific study of personal narratives. The cognitive psychologist Jerome Bruner distinguished *narrative thinking* from *paradigmatic thinking*. He said people use narratives, rather than formal logic, to construct meaning in everyday life. Donald Spence differentiated *narrative truth* from *historical truth*, noting that therapists need to distinguish a historically accurate narrative from a functionally accurate, adaptive narrative. Dan McAdams has championed the notion that one's narrative life story is one's personal identity – the venue through which one constructs a sense of purpose, unity, and meaning in life. He and a growing number of others have outlined frameworks for the scientific study of personal narratives as a key facet of the individual's overall personality. Whereas some narrative research aims to show how people's interpretations are biased compared to objective criteria, most narrative research is currently more constructivist in nature. This research examines how meaning-making is shaped by social context and is related to phenomena like personality characteristics, well-being, adaptation to trauma, and development over the life span. This research is increasingly showing that psychosocial meaning-making plays a unique role in people's lives: The relations between interpretative

processes and other phenomena cannot be explained more parsimoniously by so-called objective factors such as demographics and broad personality traits.

## **Constructivism versus Positivism and Physicalism in Scientific Psychology**

Constructivism can be found across psychological disciplines, but *positivism* and *physicalism* are at least equally prevalent. Positivism, which has roots in essentialism, is the perspective or assumption that truth is known through the scientific method of inquiry. Also popular in contemporary psychology is physicalism, also known as *materialism*, *physical essentialism*, and *physical monism*. This position states that the nature of all things is ultimately reducible to something physical, apart from interpretation. As mentioned, constructivism does not generally take a stand on the absolute nature of things, but adherence to physicalism and especially positivism seems to make it difficult to acknowledge the validity and utility of constructivism.

Some critics of positive psychology argue that it is overly positivistic in its attempt to investigate human strengths, virtues, well-being, and growth processes. Constructivists with strong rationalist, humanistic, and/or postmodern roots often contend that the scientific method is inappropriate for studying a topic so inherently subjective and contextual as psychology. For example, Kenneth Gergen has argued that the self – the subject of so much research criticized as positivistic in social and personality psychology – is scarcely an entity at all, “saturated” as it is by a hyperrelativistic sea of ever-changing cultural values.

Yet many postmodernists, including Gergen, have argued that postmodernism does not necessarily dismiss scientific psychology but rather poses steep challenges for it. One promising path, proposed by Dan McAdams and colleagues, is that of psychosocial constructivism. The view here is that, while the individual is indeed bombarded by changing social values and myriad models for interpreting and planning one’s life, the empirical fact is that people do develop and maintain relatively stable (though modifiable) value systems over time. These value systems are constructed in changing social contexts but are filtered through the mind of an individual who can and does construct a sense of continuity and enduring purposes. Still, a question that remains is whether or to what degree it will be possible to reconcile scientific psychology’s need for generalized knowledge with constructivism’s need for context sensitivity, especially given the field’s rapid differentiation of contextual factors and the seemingly rapid changes in cultures worldwide.

## **The Future of Constructivism and Positive Psychology**

Constructivism and positive psychology have much to offer each other. Positive psychology is currently charting courses for the study of many constructivist ideas

and methods, such as psychosocial perspective-taking, meaning-making, how subjective interpretations affect happiness, spirituality, the social construction of (notably prosocial) emotions and values, intentional self-development, advanced stages of cognitive and social-cognitive development in adulthood, therapeutic adjustment and transformation, organizational behavior and leadership, political and other ideologies from inside the minds of those who hold the beliefs, and much more. This work is aiming to create neither a true model of the world nor a simplistic model of happiness and flourishing. Instead this work seems focused on models of happiness and flourishing that target interpretations within dynamic human contexts.

SEE ALSO: ► Cognitive appraisal ► Existential psychology  
► Humanistic psychology ► Narrative identity

## Contentment

Sherry L. Beaumont

*University of Northern British Columbia*

*Contentment* is a form of pleasant affect involving tranquility and serenity. It is an emotional response that tends to arise under conditions that include high certainty and low effort, and thus, is akin to the relief or mild joy one might experience in response to feeling safe and cared for. Contentment has traditionally been conceptualized as an aspect of the broader constructs of subjective well-being and happiness. Within this conceptualization, contentment is viewed as the positive affective basis, along with joy, for more global well-being; one's experience of positive emotions (including contentment) contributes to one's subjective appraisal of happiness.

Until recently, little research focused on the experience of positive emotions, like contentment, primarily due to the fact that relative to negative emotions, positive emotions are less discrete, fewer in number, and less obvious in terms of their adaptive functions. For example, whereas basic negative emotions such as anger or disgust are associated with specific facial expressions, the experience of positive emotions such as contentment are not often signaled by specific facial movements. Similarly, negative emotions appear to have obvious adaptive functions (e.g., fear promotes fleeing in times of threat), whereas the functions of positive emotions are less well-understood in terms of the link to specific actions.

With the advent of positive psychology, a more focused approach on positive emotions was initiated by Fredrickson who proposed that positive emotions are unique in that, unlike negative emotions which direct one's responses toward narrow and specific goals, they offer opportunities for broadening one's "thought-action repertoire" in a way that promotes positive well-being by increasing one's personal resources. Fredrickson's model postulates that certain positive emotions

lead to broader-based thought-action tendencies. For example, interest initiates the tendency to explore and take in information, joy leads to the urge to play and create, and contentment gives rise to the urge to savor and integrate one's circumstances.

Empirical research provides support for the hypothesized links between positive emotions and thought-tendencies specifically for joy and contentment. Fredrickson and colleagues found that joy and contentment represent two distinct types of positive emotions that provide broader-based thought-action tendencies than are experienced in neutral or nonemotional states. Specifically, joy is a high activation positive emotion, whereas contentment is a low activation positive emotion, and both actually undo the unhealthy effects of negative emotions. Using a unique experimental methodology involving the viewing of film clips designed to elicit positive (amusement, joy, contentment), negative (sadness) or neutral emotions, Fredrickson, Mancuso, Branigan, and Tugade found that the experience of contentment elicited via a film clip depicting ocean waves breaking on a beach reduced the cardiovascular reactivity associated with negative emotions. Therefore, contentment, along with amusement and mild joy, can be viewed as an emotion that broadens one's resources by undoing the potentially damaging effects of negative emotions.

Although mild joy also produced undoing effects, contentment is particularly unique in that it is associated with only mild activation, and thus, it provides the opportunity not only to regulate the experience of negative emotions, but also to savor the present moment and to integrate one's current circumstances in a way that broadens one's conception of self, thereby leading to the potential for an improved mindset with regard to self and the world. In fact, Fredrickson suggests that contentment may provide the basis for interventions based on relaxation techniques to reduce stress. Fredrickson argues that relaxation and meditation practices are based on the experience of contentment, which promotes mindfulness, savoring, appreciation and awareness, which work to decrease negative emotions and increase well-being. This hypothesis points to the applied implications of research on contentment and highlights the need for future research to focus on the potential links between contentment, mindful cognition, and optimal well-being.

SEE ALSO: ► Authentic happiness ► Happiness ► Joy  
► Positive emotions

## Coping

Jennifer S. Cheavens<sup>a</sup> and Laura E. Dreer<sup>b</sup>

<sup>a</sup>*Ohio State University*; <sup>b</sup>*University of Alabama at Birmingham*

*Coping* is “a response aimed at diminishing the physical, emotional, and psychological burden that is linked to stressful life events and daily hassles” (Snyder &

Dinoff, 1999, p. 5). The conceptualization of coping processes has evolved over the past several decades resulting in several contemporary models of coping. One of the widely accepted models is known as the transactional model of stress appraisal and coping developed by Lazarus and Folkman. According to this conceptualization, coping consists of “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised to be taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141). From this perspective, psychological stress is viewed as the dynamic interplay between the person and the environment. Thus, coping is determined by the degree to which a person perceives a threat in a situation (*primary appraisal*) and by the person’s perception of personal and social resources that they can utilize to confront the situation (*secondary appraisal*).

## Cognitive Appraisal of Stress and Coping

The central feature of the transactional model of stress and coping is the subjective, *cognitive appraisal* of the situation-specific event. That is, an individual perceives or appraises the meaning or personal significance of a specific event or stimuli as something stressful with which to cope. Lazarus (1991) describes two types of specific appraisal processes: “*Primary appraisals* refer to whether what is happening is personally relevant; *secondary appraisals* refer to coping options and prospects” (p. 87; italics added). In other words, an individual appraises the significance of what is happening in the person-environment relationship and evaluates the potential influence of the stressor on their personal well-being as well as their resources to effectively manage the demands of the stressor. The key feature here is the degree to which a person evaluates the specific stressor (in either the internal or external environment) as personally significant. Thus, whether an event is something with which one must cope is determined by the idiographic significance of the stressor to the individual in question.

Empirical support for individual variability in cognitive appraisals of various stressors has been roundly documented in the contemporary literature. For example, research in several areas of adjustment to chronic health conditions has shown that appraisals of various chronic health conditions on goal-directed behavior and expected activities have greater influence on emotional distress than does the actual severity of the condition itself. That is, while some individuals diagnosed with various chronic health conditions (i.e., spinal cord injury, low vision) may react with distress, others may not and this determination is at least partly related to the degree to which goal-related activities are restricted. This work demonstrates the importance of the appraisal process for understanding individual adaptation to illness, stress, and injury.

To illustrate the individual variability of the appraisal processes, imagine three men who all have been recently diagnosed with a chronic health condition. Each evaluates the personal relevance of the situation for their physical, social, and

psychological well-being (primary appraisal). They also consider their coping options and resources in order to adapt and live with the chronic health condition (secondary appraisal). It is possible that each man reacts differentially in light of how he perceives the disruption of the condition on his expected goal-directed activities. For instance, one might evaluate the situation as distressing yet remain confident in his abilities to cope with the situation given his strong social support network, financial status, and supportive work environment. On the other hand, the second man may have the same primary appraisal but have a different secondary appraisal of the situation based on his current context. For example, the second man may be unemployed, going through a stressful divorce, experiencing a reduced social support network, and lacking medical insurance due to a lay off prior to the diagnosis. The third man may make the same primary appraisal as the first two and have a social and personal context similar to the first man. The third man, however, may believe that he does not have the personal resources to meet the demands of the chronic health condition. Therefore, although this man has the same apparent resources as the first man, his appraisal of his diminished ability to cope may lead to increased distress. Thus, it is apparent that the manner in which these three individuals appraise the stress of being diagnosed with a chronic health condition on their individual person-environment situation will vary substantially and influence their ability to cope, despite the fact that both men were diagnosed with the same chronic health condition with the same level of severity and come from historically similar demographic backgrounds.

## **Domains of Burden**

The definition of coping provided here delineates physical, emotional, and psychological domains of burden and suggests that the process of coping must diminish the burden in one or more of these domains. The physical domain includes biological, neurological, physiological, immunological, musculature, and other areas that are related to one's physical abilities and functioning. The physical domain was the initial domain posited by theorists and researchers as an area of potential burden with which an individual must make efforts to adapt. Stress was posited to result from biological, somatic, or psychological demands on the body, and, following this medical model, impact individuals in a dose-specific manner. Thus, a universal level of stress might result from a particular level of a viral loading leading to a corresponding level of resources or coping necessary from the individual to combat the stress. This model left little room for differences within and across individuals.

The second domain of burden is the psychological domain. Broadly, the psychological domain encompasses both inter- and intra-personal processes that might impact the appraised level of stress as well as the ability to act in a manner to diminish the stress. These processes might include, but are not limited to, perceptual abilities, cognitive abilities, interpersonal relationships, social networks,



intellectual functioning, attentional focus, and memory. Appraisal, as previously defined, is largely a psychological process and therefore, the psychological and physical domain taken together were one way in which the conceptualization of coping progressed from a simple, static version of the universality of stress and the stress response to a transactional model.

The third identified domain of burden is the emotional domain. As such, emotional processes, like the physical and psychological domains of burden, can be conceptualized as related to both the appraisal of stress and one's ability to successfully diminish negative consequences and stressors. For example, one might imagine a situation in which a somewhat benign event is appraised as overwhelming, stressful, or otherwise negative based on the mood of the perceiver. Many researchers have found that humans evidence a mood-consistent bias in their evaluations of events. Furthermore, one can imagine that particular individual differences in emotional responding and emotional regulation would be predictive of an individual's ability to diminish burden.

## Coping Strategy Classifications

There have been several attempts to categorize coping strategies into broad areas of classification. According to Lazarus (1991), "coping processes alter the person-environment relationship either in reality or in its appraised meaning, both of which, in turn, change the prior emotional state" (p. 87). Two major types of coping strategies include *problem-focused coping* strategies and *emotion-focused coping* strategies. At least three of the most often used and cited measures of coping have a division of subscales based on the problem- and emotion-focused classifications. Problem-focused coping is defined as efforts at reducing stressors and demands that are impacting one's resources. Examples of problem-focused coping include problem assessment and identification, problem-solving through the development of alternative courses of action, and, ultimately, moving toward problem resolution, thus changing the stressful situation for the better. Emotion-focused coping, alternatively, is defined as efforts aimed at managing one's own emotional dysregulation. Examples of emotion-focused coping strategies include avoidance, seeking emotional support, venting of emotions, denial, and positive reappraisal. Historically, problem-focused coping has been associated with greater psychological well-being and emotion-focused coping has been associated with greater psychological distress.

Recently, there has been attention devoted to developing a model of emotion-focused coping that emphasizes the adaptive potential of incorporating emotional processing into coping. Stanton and her colleagues (2002) defined *emotional-approach coping* as comprised of two separate factors: "emotional processing (i.e., active attempts to acknowledge and understand emotions) and emotional expression" (p. 152). Thus, emotional approach coping is similar in process to problem-focused coping in as much as the strategies are to move toward the stressor and

the resulting emotional consequences, as opposed to away from the stressor. Additionally, this classification of coping strategies suggests that regulating one's own emotions through examination and acceptance (among other things) can be a useful endeavor in coping with both external and internal stressors.

## **Adaptive and Maladaptive Coping**

Although earlier accounts of coping described these efforts as neutral, there has been some recent debate in the coping literature as to whether all coping can be classified as "adaptive" or if there are particular coping strategies that would be classified as "maladaptive." For example, many researchers and theorists have made the argument that coping strategies emphasizing escape or avoidance of stressors or a focus on one's own emotions (however, see previous discussion of emotion-approach coping) can be considered maladaptive. Problem-focused coping, most frequently, is described as an adaptive form of coping. The primary difficulty in attempts to classify any coping strategy as either adaptive or maladaptive is that this classification effort is inherently tautological. In other words, if a particular strategy has adaptive outcomes then this is an adaptive strategy and if the outcomes are maladaptive or negative for the individual, the strategy is defined as maladaptive. Thus, removing the conflation of outcome and coping strategy calls into question some of the evidence that particular coping strategies are inherently maladaptive.

Another potential classification of adaptive and maladaptive coping is to focus on the individual differences related to coping and determine trait level distinctions. One such individual difference that has received significant attention, particularly in the pediatric psychology literature, is resiliency. *Resilience* has been described as both a form of coping (e.g., traumatic growth) and an individual difference that results in *improved* functioning (physical, psychological, and/or emotional) in the face of significant stressors and adversity (e.g., protective factors). The research question is how an individual emerges from a situation that might traumatize others without developing or demonstrating some sort of pathology or lasting negative consequences. If the processes by which resiliency is manifested can be identified *and* if these processes are malleable, practitioners would be able to utilize the research on resiliency to teach effective coping to others.

Just as the model of the cognitive transaction largely replaced a static model of stress and coping, it is likely that the most useful determination of the effectiveness or adaptability of a coping strategy will be in a transactional model that considers the person, the coping strategy, the environment, and the stressor. For example, from the time of defense mechanisms to emotion-focused coping, denial and avoidance have long been considered a maladaptive coping strategy or mechanism. It is not hard to imagine, however, a stressor, person, and situation for which denial or avoidance might be an adaptive coping strategy in the short term. There are countless examples in which an individual denies the odds of

recovery and surpasses all expectations or an individual denies some physical or psychological discomfort in the short-run to move toward a larger, adaptive goal. Furthermore, current research suggests that at times active attempts to avoid thinking about stressors results in increased distress while other investigations demonstrate that actively avoiding negative information can result in decreased distress. It is possible that rigidly adhering to a specific set of coping strategies or rigidly refusing to develop new coping strategies may be evidence of a coping deficit and, therefore, leads to maladaptive outcomes for the individual.

## **Acute and Chronic Stressors**

Although the function of coping remains the same, it is likely that the form of an individual's attempts at coping change over the course of time. Both internal and external stressors can be acute or chronic. For example, someone may get an excruciating headache one afternoon that seems to appear out of the blue and lasts for a few hours. Another person may have a similar headache on the same afternoon that results from a chronic condition that often produces such headaches. The chronic versus acute nature of these presentations may determine the type of coping strategy in which each individual engages. Both individuals may take some medication, drink water, and go to bed for the remainder of the day. For the first person in this example, that is likely the end of the coping necessary for this particular event. For the second person, however, there are probably more components to this particular coping event that are required to meet the demands of the stressor as the chronicity of the condition will likely begin to impact the individual emotionally, financially, and interpersonally in addition to the initial physiological and psychological effects. It is likely that more chronic stressors require more complex and diversified attempts at coping. Chronicity then becomes another factor that influences the person, environment, and strategy transaction as some strategies that may be effective for individuals with particular acute stressors may not be as effective with particular chronic stressors and may ultimately worsen the condition.

## **Applications of Coping**

There are several important applications of the previously identified coping concepts for a variety of mental and physical health problems. For example, attention to the measurement and potential manipulation of appraisal variables has recently gained attention in the chronic health and disability literature. As discussed previously, a number of recent studies have indicated that the appraisal process significantly impacts individual adaptation to illness and injury. This work stems from the transactional model of stress and coping and demonstrates the importance of individual variation in the adjustment process for persons with chronic

health conditions. Future research is needed to develop specific interventions to target change in the appraisal process in medical settings.

Additionally, continued development of models and empirical investigations of positive growth through coping following acquired disability and adaptation of persons with chronic health conditions to their environments is warranted. Unfortunately to date, researchers "have given only scant attention to positive growth and optimal living with chronic health problems, as well as the related searches for meaning, purpose, and fulfillment" (Elliott, Kurylo, & Rivera, 2002, p. 689). Only recently has attention shifted to focus on more comprehensive models in this area. For example, Elliott, Kurylo, and Rivera (2002) propose "an integrative and dynamic model" which conceptualizes adjustment following a disability in several broad-based domains (p. 689). Within such a model, primary components may involve individual characteristics and the immediate social and interpersonal environment, both of which influence the phenomenological and appraisal processes that comprise elements of positive growth and subsequently predict mental and physical health outcomes. These components can be viewed within a developmental continuum to reflect the ongoing process of adaptation and growth both within the person and the environment, and the changes in the interactions between the two.

Empirical investigations are also needed in the coping literature that examine the correlates and associated individual differences of positive growth following disability. Because "loss events, especially those that are sudden or unexpected, often appear to initiate a personal evaluation or stocktaking of the meaning of one's life," longitudinal studies that follow individuals from the time of injury of an acquired disability or chronic illness would be particularly useful in determining the course of such growth (Nolen-Hoeksema & Davis, 2002, p. 598). In addition, as disability and chronic health conditions also are viewed as social problems, investigation of social-environmental factors (e.g., family, socioeconomic status, community values) that influence individual adjustment (e.g., resilience, hope, motivation, personal values) and personality are needed. Studies designed to understand specific growth processes and positive transformations following loss associated with a disability will serve to inform the development of future positive psychology interventions. Interventions aimed at fostering positive life changes and helping individuals find new meaning and growth within their loss experiences will be particularly important as those living with one or more chronic health conditions are expected to increase substantially over the next few decades with the aging of society.

## **Positive Psychology and Coping**

The integration of positive psychology and coping constructs represents a promising new area of theory and research. Coping is one area of positive psychology that is common to all individuals. Although all attempts at coping do not necessarily result in growth and flourishing, all people cope with the demands of internal

and external environments that tax resources available to the individual. Thus, all organisms cope in some way and understanding this potentially adaptive process and how to increase the effectiveness of such efforts is of fundamental importance to all people. Future investigations that provide new perspectives on successful coping and are amenable to empirical validation are needed. The degree to which such models and investigations can provide specific information about which strategies work, in what contexts, and for whom, will determine the degree to which such research can be applied to increase positive adaptations. Several recent investigations have begun to demonstrate preliminary support for fostering successful coping; however, further investigations in the area of intervention research are warranted and could potentially have enormous impact on coping.

SEE ALSO: ► Emotional approach coping ► Global well-being  
► Mature defense mechanisms

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## Cortisol

Heather C. Abercrombie  
*University of Wisconsin*

Cortisol is a hormone that is released from the adrenal gland. A common misconception is that the hormone cortisol is “bad for you” (i.e., always exacerbates health problems and/or causes feelings of distress). While it is true that chronically elevated cortisol levels can have deleterious effects on health, mild elevations of cortisol are beneficial in many ways. Acute cortisol elevation is adaptive insofar as it mobilizes and directs bodily energy consumption, modulates psychological processes, and restrains (or “turns off”) stress-responsive systems.

## Downstream Regulation of Cortisol

Several upstream hormonal regulators control the release of cortisol. Corticotropin-releasing hormone (CRH; which is sometimes called corticotrophin-releasing factor, or CRF) and arginine vasopressin (AVP) are released from the hypothalamus and control the release of adrenocorticotropin hormone (ACTH) from the pituitary gland. ACTH is released into the blood stream and controls the production and secretion of cortisol from the adrenal gland. Because the hypothalamus and the pituitary gland are the structures that most proximally control cortisol release from the adrenal, the system that regulates cortisol is called the “hypothalamic pituitary adrenal axis” (or, “HPA axis”). Recently, investigators have highlighted the important role of brain circuitry associated with emotion in the regulation of the HPA axis by coining the term “limbic hypothalamic pituitary adrenal axis” (or “LHPA axis”).

Cortisol is a hormone in primates that is very similar in structure and function to the hormone corticosterone in rodents. Both cortisol and corticosterone are also called “glucocorticoids.” Changes in glucocorticoid levels occur as a function of many factors, including circadian variation (i.e., in humans glucocorticoids are high in the morning and low in the evening), and in response to food intake, physical activity, injury, and psychological stress (e.g., psychosocial threat). Active tasks (such as exercise or public speaking) typically cause greater glucocorticoid elevations than passive tasks (such as watching an emotionally arousing movie). The types of psychological stressors that most potently cause glucocorticoid elevations are those that involve unpredictability or uncontrollability of a perceived threat.

Humans are particularly sensitive to social stressors. In the journal *Psychological Bulletin* in 2004, Dickerson and Kemeny published a meta-analysis of studies using laboratory based stressors in humans. They found that the types of stressors that cause the largest glucocorticoid increases are those that involve both uncontrollability and social-evaluative threat (i.e., the possibility of being negatively evaluated by others). Thus, when people are actively engaged in a task (e.g., presenting information to others), and they feel that they are not in control of others’ negative evaluations of themselves, cortisol elevations will often occur. In contrast, several investigators have shown that greater perceived social support is associated with better regulation of cortisol levels.

## Upstream Effects of Cortisol on the Brain and Psychological Processes

Endogenous glucocorticoids modulate activity in target tissues throughout the body and brain primarily via the two types of corticosteroid receptors, mineralocorticoid receptors (MR) and glucocorticoid receptors (GR). As mentioned above, one

function of glucocorticoids in target tissues is restraint of stress-related physiological processes, including restraint of sympathetic nervous system activation, inflammation, and their own further production and release (by suppressing release of CRH and ACTH) via negative feedback at the level of the pituitary, hypothalamus, and other brain regions (most importantly, dorsal regions of the medial prefrontal cortex [mPFC] and the hippocampus). However, not all glucocorticoid effects on the brain dampen HPA activity. In addition to negative feedback pathways, positive feedback loops exist through the amygdala and other brain regions, in which glucocorticoid elevations serve to increase brain CRH and HPA activation. Thus, positive and negative feedback circuitry operate in parallel.

The effects of glucocorticoids on many target tissues and behavioral processes follow an inverted U-shaped function in which moderate elevation of glucocorticoids enhances functioning, while extreme or prolonged glucocorticoid elevation impairs functioning. Research has associated cortisol with stress-related pathology. For instance, chronic overproduction of glucocorticoids in animals contributes to alterations (e.g., cell atrophy, cell death) in brain structures essential for regulation of the HPA axis, such as the hippocampus. However, short-term mild elevations of glucocorticoids enhance hippocampal neuronal activity. Partially related to their effects on the hippocampus, glucocorticoids affect memory. The relation between cortisol and memory follows the same inverted U-shaped function: mild glucocorticoid elevations often benefit memory consolidation, but extreme or prolonged elevations or deficiency in glucocorticoid levels impair memory formation.

With regard to effects of glucocorticoids on memory, there appear to be some very important interactive effects between emotional arousal and glucocorticoid levels. Both animal and human data show that variation in cortisol facilitates memory formation in individuals experiencing emotional arousal, but not in individuals who are not emotionally aroused at the time of learning. Research suggests that emotion-related brain circuitry (in particular, noradrenergic processes in the basolateral nucleus of the amygdala) must be activated in order for cortisol to affect memory. Thus, the hormone cortisol affects memory differentially depending on the pattern of regional neural activity and emotional arousal at the time of cortisol elevations. These data suggest that glucocorticoid elevations that occur during “non-stress” or “non-emotional” situations (such as with exercise or eating) do not facilitate the formation of memories. In a stress response with negative emotional arousal, however, cortisol *does* help memory centers of the brain (such as the amygdala and hippocampus) in laying down new memories.

The direct effects of cortisol on emotion vary. Contrary to common conceptions, many studies show that cortisol does not cause distress. Often, pharmacological manipulation of cortisol in the physiological range has no effect on self-reported emotional state. Even though physiological levels of cortisol do not have reliable effects on global measures of subjective emotional state, cortisol subtly modulates activity in brain structures related to emotion and arousal. Cortisol also has been

found to affect emotional behaviors and affective ratings of emotional and neutral stimuli. For instance, mild systemic elevations of glucocorticoids in humans and nonhumans cause reductions in physiological and behavioral indices of fear. However, corticosterone infused directly into the amygdala in animals causes anxiogenesis. Cortisol administration has also been found to heighten arousal ratings of objectively neutral stimuli. Cortisol's effects on neural circuitry related to emotion and brain excitability may cause only slight variations in affect or arousal, which may not be reliably reflected in subjective experience or detected on global assessments of affect, but may be apparent on indices that detect subtle changes in affective experience.

## **Dexamethasone and Prednisone**

It should be noted that many of the studies of the effects of glucocorticoids on psychological processes use synthetic glucocorticoids, such as prednisone or dexamethasone. Unlike cortisol or hydrocortisone (or cortisone, which converts to cortisol), synthetic glucocorticoids do not readily cross the blood brain barrier. Furthermore, dexamethasone exhibits different binding affinities for the two types of corticosteroid receptors than cortisol. Thus, studies of the effects of prednisone and dexamethasone on psychological processes must be interpreted with extreme caution when making inferences about the psychological effects of endogenous variation in cortisol.

## **Cortisol and Psychopathology**

The relation between cortisol elevations and psychopathology has long been studied. Cortisol hyperactivity has most reliably been found in severe, melancholic, and/or psychotic depression. In fact, preliminary evidence suggests that short-term blockade of the glucocorticoid receptor in psychotic depression may have salubrious effects. Chronic cortisol elevations have also been found in other forms of psychopathology, but less reliably than in severe depression. Cortisol hyperactivity in depression has been characterized alternatively as a trigger of depressive symptoms (i.e., HPA disturbance causes depression) or as a neuroendocrine response to psychological suffering (i.e., depression causes HPA disturbance). However, these polarized causal views are oversimplified. More likely, mechanisms associated with HPA dysregulation are intimately intertwined with the mechanisms that underlie psychological processes involved in depression.

Research has also shown associations between glucocorticoid alterations and fearful temperament, such that basal glucocorticoid levels have been found to be elevated in nonhuman primates and humans with inhibited behavior and anxiety. In addition, many studies have shown cortisol alterations in posttraumatic stress disorder (PTSD), with some studies showing chronic HPA hyperactivity and other



studies showing HPA hypoactivity with overactive HPA negative feedback in PTSD. This disparity in the PTSD literature may be partially accounted for by differences in subgroups of individuals with PTSD (e.g., combat veterans vs. interpersonal assault victims, or children vs. adults). Interesting preliminary data suggests that moderately elevated cortisol levels following a traumatic incident are protective against the development of PTSD. Several researchers have investigated using glucocorticoids as a preventative treatment for PTSD, and have found decreased incidence of PTSD after administering small doses of glucocorticoids following or during traumatic experiences.

In summary, feelings associated with social and physical threat are associated with heightened cortisol. However, acute cortisol elevation typically does not *cause* feelings of distress. Rather, stress-related cortisol elevations *result* from neural processing of perceived and actual threat, which results in stimulation of the HPA axis. Although chronically elevated cortisol levels are associated with psychopathology and poor health, mild elevations in cortisol facilitate many physiological, psychological, and behavioral processes.

SEE ALSO: ► Health psychology ► Neurobiology ► Social support

## Counseling Psychology

James W. Lichtenberg<sup>a</sup> and Pamela L. Knox<sup>b</sup>

<sup>a</sup>University of Kansas; <sup>b</sup>Tennessee Board of Regents

Counseling psychology is one of 11 specialties recognized by the American Psychological Associations' Commission for the Recognition of Specialties and Proficiencies in Professional Psychology (CRSPP). As described in CRSPP's archival description of counseling psychology, counseling psychology is a general practice and health service provider specialty in professional psychology. Practitioners of counseling psychology provide assessment, diagnosis, and treatment of psychopathology, while focusing on personal and interpersonal functioning across the lifespan and on emotional, social, vocational, educational, health-related, developmental and organizational concerns. While attentive to disturbances in functioning, practitioners generally focus on healthy aspects and strengths of their clients and the environmental/situational factors that affect their development and functioning.

Counseling psychology focuses both on typical or normal developmental issues and on atypical, dysfunctional, or disordered development as it applies to human experience from individual, family, group, systems, and organizational perspectives. Counseling psychology strives to help people with physical, emotional, and mental disorders to improve their well-being, alleviate distress and maladjustment, resolve crises, and increase their ability to live more highly functioning and satisfying lives.

## Defining Themes

In their introduction to the field of counseling psychology, Charles Gelso and Bruce Fretz identify five themes that unify counseling psychology and that distinguish it from other specialties within professional psychology. Their first theme is that of a focus on intact, as opposed to profoundly disturbed, personalities. Although they note recent surveys of the field that show greater numbers of counseling psychologists working with more disturbed clients than was true earlier in the specialty's history, most counseling psychology practitioners still work with clients who are within a normal range of functioning.

The second theme identified by Gelso and Fretz is that of focusing on people's assets and strengths and on positive mental health, regardless of their degree of disturbance. Counseling psychology's assumption is that even profoundly disturbed individuals have strengths, assets and coping abilities and that when working with clients it is valuable to attend to, work with and foster these strengths and assets. Counseling psychology's attention and commitment to enhancing human strengths, potential and capacity is a theme and focus that counseling psychology shares with positive psychology.

A third characteristic theme of counseling psychology is a focus on brief interventions and a favoring of counseling or therapy that is short-term. Such counseling is more likely to be educative, focused on situational problems and on conscious problem solving, as opposed to therapy focused on the analysis and reconstruction of personality and on unconscious processes.

The fourth theme characterizing counseling psychology is its emphasis on person-environment interactions – that is on people-in-context and the effect of the physical, social, and political environment on people. Such a focus contrasts with other specialties within professional psychology that have a more exclusive focus on either the person or on environment situations.

The fifth theme identified by Gelso and Fretz is that of a focus on individuals' educational and career development and on educational and vocational environments.

Similar themes or elements are reflected in the emphases that counseling psychology has used to distinguish itself from other specialties within professional psychology. In counseling psychology's petition to CRSP for continued recognition as a distinctive applied specialty in professional psychology, it noted its emphasis on healthy aspects of behavior and clients' psychological strengths (hygiology), its focus on developmental issues that confront individuals across their lifespan, the role of career and vocational psychology in identity formation and life-span development, and the analysis and consideration of persons-in-context (e.g., family, group, organization, culture) as integral, rather than as distinguished or apart from their context.

It is important to note that although other specialties may attend to these elements as well, counseling psychology is clearly distinctive in its thoughtful and

deliberate analysis of these elements when working with clients and incorporating additional assessment, diagnosis and interventions in the context of this analysis. The basic values in determining strengths to build upon in order to improve human functioning that lie at the heart of counseling psychology are also congruent with those at the core of the positive psychology movement.

## **History of the Specialty**

Historically, counseling psychology has evolved from several streams of influence. An early, but significant influence upon the development of the specialty was a concern for individuals within the context of current social problems, including unemployment. In the 1940s, additional converging influences included vocational psychology and guidance, assessment/measurement, and mental hygiene. Additional emphasis on the process of therapeutic counseling within the context of lifespan development has further defined what would become counseling psychology as a distinct specialty. When the American Association of Applied Psychology (AAAP) and the American Psychological Association (APA) joined together into a single organization in 1945, 19 divisions were established. Although not formally organized until 1948, these “charter divisions” of the American Psychological Association became the mechanism by which the diversity of interests within psychology could be supported while at the same time bringing organizational unity to the discipline. Division 17, one of the 19 charter divisions, began as the Division of Personnel and Guidance Psychologists, changed its name to the Division of Counseling and Guidance in 1951, to Counseling Psychology in 1953, and to the Society of Counseling Psychology in 2003.

## **Contemporary Counseling Psychology**

Counseling psychology’s attention to and recognition of environmental/situational influences on human experience and behavior, in addition to human strengths, has led in recent years to the specialty identifying and addressing the impact of cultural, gender, and lifestyle issues on individual and system development and functioning. More specifically, counseling psychology’s analysis of people-in-context rather than the individual or context alone, its attention to strengths rather than pathology, and its focus on developmental phase rather than current dysfunction, have created a perspective that has fostered and developed the area of multicultural counseling. Additionally, counseling psychology’s roots in advocacy and addressing social problems has fostered the examination of and sensitivity to group differences including gender role, race/ethnicity, age, disability, sexual orientation, and sexual harassment.

It is noteworthy that within professional psychology, counseling psychology initiated guidelines for therapy with women as well as for multicultural competence.

Although these issues clearly are shared by other specialties, it was the perspective and elements of analysis of counseling psychology that allowed them to evolve, nurtured their development, and advocated their integration in all forms and levels of intervention across settings.

Counseling psychology's distinctive themes and core elements, as well as its unique combination and integration, and the breadth of application of the specialty's intervention techniques across individual, family, group, and organizational systems have led to the distinctive perspective and approach of counseling psychology as an applied psychological specialty.

### Clients Served by Counseling Psychologists

Counseling psychologists are prepared to work with clients of all ages, using individual and group modalities, to assist their clients toward solutions as well as toward enhancement of personal and interpersonal functioning. Counseling psychologists also consult with organizations and work groups to help provide an employment environment maximally conducive to human functioning and to enhance the ability of organizations to increase their productivity and effectiveness.

### Problems and Issues Addressed by Counseling Psychologists

In their work with clients and client systems, counseling psychologists will address a variety of concerns and issues. These include educational and vocational/career/work adjustment issues, relationship difficulties, substance abuse problems, skill deficits, stress management and coping, organizational problems, physical disabilities and adjustment/adaptation, personal/social adjustment, personality dysfunction, and affective disorders – concerns/problems that are, whenever possible, viewed from developmental (lifespan), environmental, and cultural perspectives.

### Procedures and Techniques used by Counseling Psychologists

The procedures and techniques used by counseling psychologists include: (a) individual, family, group and systemic counseling and psychotherapeutic interventions; (b) crisis intervention, disaster and trauma management; (c) psychodiagnostic assessment techniques; (d) psychoeducational/preventive programming; (e) organizational consulting; (f) program and treatment evaluation; (g) training; (h) clinical supervision; (i) test construction and validation; and (j) methodologies for quantitative and qualitative inquiry. Intervention procedures and techniques may be preventive, skill enhancing or remedial. Therapeutic intervention procedures generally have as their focus changing clients' cognitions, feelings and behavior. These interventions may range from short-term to longer-term approaches, although the emphasis within counseling psychology is generally on shorter-term or time-limited interventions.

## Future Directions

The future for the field of counseling psychology is difficult to predict. As early as the mid-1980s, in the light of developments in organized health care, there were questions raised as to the viability of counseling psychology as a distinctive discipline within professional psychology. Although an immediate demise of counseling psychology was not foreseen, trends within the field to become more like clinical psychology, as well as clinical psychology's adoption of some of the themes that historically has characterized counseling psychology (e.g., prevention, short-term interventions, focusing on strengths/assets, and career/vocational issues), were obvious even to the leadership of the field. When in the mid-1990s the American Psychological Association's Commission for the Recognition Specialties and Proficiencies in Professional Psychology (CRSPPP) required existing specialties to petition for continued recognition as such, there was concern within counseling psychology that it might fail to make a case for its distinctiveness, or that clinical and counseling psychology might be merged in to a more general "health care psychology." This was not the case, however, and counseling psychology and clinical psychology have continued to be recognized by CRSPPP as distinct specialties within professional psychology. At the same time, a trend toward the discontinuance of some accredited graduate training programs in counseling psychology has raised concern over the viability of and support for such training and for the field – at least in some universities. Certainly there continues to be a niche for the services of counseling psychologists. But whether the field – at least in terms of professional practice – will remain sustainable as a distinct specialty is a matter that will resolve in time.

SEE ALSO: ► American Psychological Association ► Common factors  
► Person-environment fit ► Vocation

## Courage

Cynthia L. S. Pury<sup>a</sup> and Cooper Woodard<sup>b</sup>

<sup>a</sup>*Clemson University*; <sup>b</sup>*Wheaton College*

*Courage* is the intentional pursuit of a worthy goal despite the perception of personal threat and uncertain outcome.

## Intellectual and Social Context

Every life contains a measure of risk, threat, and challenge. As children and adolescents, we may draw on courage to confront separation from parents and changes

at home or school. As young adults, courage may be needed to find a mate or to secure a job. At any age, courage can help us deal with unexpected health problems or other external troubles. But courage also comes into play when we face our inner world with less obvious, but perhaps more challenging, concerns. Coping with intense and changing emotions, making sense of a developing self-image, and reaching for meaning and authenticity in our lives are a sampling of these inner struggles. How persons meet these external and internal challenges depends in part on the nature and quality of their courage, and the degree of courage may define the extent to which their lives are marked by active exploration, confidence, and a general sense of well-being.

Courageous action is valued in all cultures, and people encourage and support others in their efforts to overcome threatening situations. We admire and respect the union organizer who risks losing her job to better the lives of coworkers, the athlete who competes despite injury, and the housewife leaving an abusive relationship. We build monuments to those who overcame worthy challenges and award medals for courageous conduct. Courage shows its face unmistakably in the bold actions of soldiers, fire fighters, and social reformers, but also in the quiet actions of the psychotherapy patient, the downtrodden child, and the parent facing serious illness. It can be a one-time, minimally considered act of monumental importance and risk, or a lifetime of intentional, directed, and selfless acts. Courage reveals a measure of strength of character by first asking us to question what is important, and then by testing our willingness to risk our own safety for the purpose of protecting what we hold dear.

## Major Dimensions of Courage

There have been many attempts to identify and understand courage better, yet an inclusive and comprehensive definition remains elusive. Rachman's research focused on the component of fear and fearlessness, while other scholars focused on other facets of courage, such as the need for awareness and active coping. In his reflections on the patient-physician relationship, Shelp identified the following components of courage: voluntary action, dangerous circumstances, reasonable appraisal of risk, pursuit of a perceived good, uncertainty, and perhaps fear. Wrestling with this last element, Shelp states that "courage masters fear but the courageous person is not necessarily fearless or fearful" (1984, p. 355).

Woodard defined courage as "the ability to act for a meaningful (noble, good, or practical) cause, despite experiencing the fear associated with perceived threat exceeding the available resources" (2004, p. 174), highlighting the role of fear in the creation of inherent threat and uncertainty. Rate, Clarke, Lindsay, and Sternberg suggested specific dimensions of courage, and identified essential components of courage: intentionality, deliberation, personal risk to the actor, noble/good act, and *perhaps* fear. Currently, there appears to be a consensus that courage requires the element of *intentionality*. The actor must have an awareness and understanding

of the presented occasion for courageous action, and voluntarily decide to act. It also requires a *worthy goal*, deemed so by merit of that goal's moral, noble, or otherwise good value, typically from the perspective of the actor. Finally, the actor must perceive the occasion for courage as *potentially personally threatening*, and the *outcome must not be certain*. There is no courage where personal safety is assured, but it is here that a secondary or parallel role of fear becomes relevant. Personal risk and uncertainty may or may not induce the emotional response of fear, depending on factors such as training, familiarity, and confidence. While this added emotion would be expected to emerge from personal threat and uncertain outcome, some authors believe that acting under these conditions constitutes courage with or without the presence of fear.

## Changes over Time in Courage and its Treatment

Socrates and his contemporaries debated the nature and qualities of courage, focusing mainly on *andreia*, a term used to describe the bravery of soldiers on the battlefield faced with physical threats. Even these early philosophers pondered the role of fear in courage, suggesting that soldiers must be able to show wisdom in distinguishing between legitimate and illegitimate fears. Plato expanded the concept of courage to include the general resistance of evil, and in time, courage became one of the cardinal virtues of this period. During the Middle Ages, courage was combined with faith, hope, and charity to form the virtues of Christian morality. An increasingly inclusive conceptualization of courage was reflected in the works of St. Thomas Aquinas, who noted the importance of facing physical threat with *fortitudo*, but who also placed emphasis on the general overcoming of fear to enhance action.

In the more recent past, courage has continued to be associated with physical threat, yet literary sources and contemporary philosophers continue to suggest that there is more to courage than the brave soldier. Putman noted the psychological courage needed to cope effectively with the threat of our own destructive habits and irrational anxieties. Rachman explored fear, fearlessness, and the positive effects of training and confidence, proposing that growth took place on a courage-to-fearlessness continuum. In the past 10 years, courage has received increased attention as the area of positive psychology re-focuses attention on strengths and virtues with the potential to augment well-being.

## Current Courage Research and Theory

### Components of Courage

A variety of types of courageous action have been differentiated by scholars. These differ in both type of risk and nature of the worthy goal. The two most commonly

described include physical and moral courage. *Physical courage* involves taking physical risks for a worthy goal, commonly including saving the life of another. *Moral courage* involves standing up for moral good against social opposition, exemplified by social reformers and whistleblowers. The risk may involve a loss of social standing or even one's own self-concept. *Vital courage*, a term coined by Finfgeld involves mustering the strength needed to thrive in the face of physical illness or other stable threats to well-being. A related construct, *psychological courage*, involves risking one's own psychological equilibrium to achieve a worthy goal.

Alternative typologies involve examining the context of the courageous action. Greitemeyer, Fischer, Kastenmüller and Frey differentiate *civil courage* from courageous actions taken in the course of one's professional or military responsibilities. Woodard and Pury found individual differences in courage based on a combination of the context and goal of the action. Their four contexts included: *work courage*, courageous actions taken in the context of one's career or other major personal goal; *belief-based courage*, the courage to stand up for one's religious or political beliefs; *social courage*, the courage to take a moral stand for specific others despite social pressure; and *family courage*, or courageous actions taking place in the context of familial or other close relationships.

According to Peterson and Seligman's Values in Action (VIA) classification system, courage is one of six broad human virtues identified across cultures and time. In the VIA system, each virtue is comprised of more specific strengths, with the component strengths of courage being *bravery*, *perseverance*, *integrity* (or *authenticity*), and *vitality* (or *vigor*). Recent research by Pury and Kowalski suggests that of these, perseverance may be the most universal strength of courage.

### Measurement of Courage

Few published scales are available to measure individual differences in courage. Most are comprised of multiple self-report items. The scales that accompany the VIA system measure several virtues including courage. Questions on the VIA ask participants to think about their typical behaviors and preferences, and courage is measured as the composite of the four component strengths: bravery, perseverance, integrity, and vitality.

In contrast, the Woodard-Pury Courage Scale asks participants to estimate their likelihood of acting courageously in specific hypothetical situations. A supplemental scale also measures the fear participants would experience in each situation.

The courageousness of a specific action, as opposed to an actor's dispositional courageousness, may be affected by the frame of reference used for comparison. According to research by Pury, Kowalski, and Spearman, actions high in *general courage* are those which would seem courageous for anyone taking them. These actions may be taken with more confidence and less fear. Actions high in *personal courage*, on the other hand, are courageous only when the actor's own limitations,



fears, or other specific individual circumstances are known. These actions may be taken with greater fear and less confidence.

## Interfaces with Related Concepts

### *Fear*

Some courage theorists define courage as action taken despite fear, making elevated fear a necessary component of courage. Rachman described courageous actions in part based on a tripartite model of fear involving emotion-based changes in physiology, cognition, and behavior. Courageous actions occur when a person experiencing fear-related physiology and/or cognition does not behave in a fearful manner. Others argue that fear is merely a very common feature of courage. This fear may be caused by personal risk to the actor, uncertain outcome, or both. Retrospective self-reports of fear during a courageous action indicate that fear is typically at its highest before the action is taken, lower during the action, and declines precipitously after completion of the action.

### *Self-efficacy or confidence*

A subjective sense of confidence and mastery may also accompany courageous actions. Military trainees show an inverse relationship between confidence and fear. More recent research on retrospective reports of courage has found that feelings of confidence are lower before courageous action is taken, increasing slowly during and after the action.

### *Hope*

Snyder's model of hope involves both the belief that one can develop pathways to a desired goal and the ability to motivate one's self to create and follow those pathways. Courageous actions appear to have both of these features, and are rated by participants as being high in hope.

### *Altruism and kindness*

Many courageous actions involve helping other people, and participants rate their own courageous actions as being marked by kindness. Yet, courageous behavior appears to be distinct from more traditionally studied altruistic actions. Ratings of prototypes of moral exemplars indicate distinctions between "just," "brave," and "caring" individuals, although there is some overlap. In situations that demand courage as opposed to altruism, individuals believe they have greater responsibility to take action and require fewer specific skills to act. They expect to face more negative and fewer positive social consequences. Social norms are more salient, and, emotionally, the person contemplating a courageous action will experience more evaluation apprehension, anger, and empathy. The classic bystander effect, in which people are less likely to help a person needing assistance in the presence of one or more bystanders than when alone, disappears for situations that demand courage.

### Obedience to Authority and Conformity

Moral courage frequently requires standing up to others, sometimes powerful others. In employment settings, extreme resistance to authority is demonstrated by whistle-blowing, or the intentional disclosure of an organizations' wrongdoing by one of its members. Standing up to others for what is right is a common theme of courageous action.

Courageous behavior, while not measured as such, can be seen in studies of nonconformity. Conformity to perceived group norms may be reduced by multiple factors, including decreasing the perception of personal threat and elevating the importance of the task. Exposure to a courageous nonconforming model also decreases conformity.

### Gender Differences in Courage

While men vastly outnumber women in public awards for bravery, Becker and Eagly found that slightly more women than men undertook other heroic actions: saving Jewish people from the Holocaust, becoming living organ donors, and volunteering for dangerous overseas work. They explained these differences in terms of male role construction, emotional control, and situational requirements for physical speed and power – present in male-dominated situations – and empathic concern and relational construal – present in situations with greater gender balance.

## Methodological Issues and Problems

### Necessary Components on a Continuum

Most authors appear to agree that a courageous action must be undertaken for a noble goal, involve personal risk borne by the actor in pursuit of that goal, and must be voluntarily undertaken. Although some authors argue that personal fear is required for courage, others describe it as a correlate of courage. The nobility of the goal, amount of personal risk, and degree of voluntariness are also areas which require careful thought by courage researchers. The higher the standards for these three components are set, the rarer the action. When the standards for all three are extremely high, the act may be labelled *heroic*. Such actions are infrequent in the natural world and cannot be induced ethically, thus study of them may be limited.

### Unit of Analysis

Both actions and people may be described as courageous, and research has typically focused on either the characteristics of courageous action or on individual

differences characterizing courageous people. Research examining both has been rare.

## Future Directions in Research, Theory, and Methodology

### Room for Growth

Very little is known about the psychology of courage. At the time this entry was written, only 161 scholarly articles about courage were listed in the major psychology database (*PsychINFO*) from the 1800s to today. By contrast, 157,048 articles about risk, fear, or avoidance were listed. Advances are needed in all areas of courage research.

### Laboratory Studies

The amount of risk necessary for an action to be considered courageous has a direct bearing on the feasibility of laboratory or experimental studies of courage. If courageous actions can only be taken in the face of significant risk, ethically, they cannot be created in the lab. However, if less extreme risk also can be met with courage, then laboratory models are possible. Such laboratory models make it possible to examine courageous behavior as it happens, not merely in retrospect, and allow for the development of neuropsychological models.

### Occupational Courage

Research by Worline suggests that courage is frequently displayed on the job. These actions go well beyond emergency responders or military personnel displaying physical courage to include workers in any job standing up for what is right and overcoming personal fears for advancement. The extent to which an occupational setting influences courage, and is influenced by it, expands courage research to an organizational setting.

### Courage-Enhancing Interventions

As we learn more about the causes and correlates of courage, positive psychologists will have a firmer foundation on which to base interventions. Research on individual differences may guide interventions to develop a courageous approach to life, while research on courageous actions may guide one-time interventions used to help individuals thrive in the face of a specific risk.

SEE ALSO: ► Character strengths (VIA) ► Heroes ► Perseverance  
► Vigor ► Virtues

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## Creativity

Barbara Kerr

*University of Kansas*

Creativity can be seen as a characteristic of a person, a product, or a process. In people, creativity is most often seen as the capacity to solve problems in new ways and to produce works that are novel, appropriate, and socially valued. Products are seen as creative when they provide innovation to knowledge and technology, new concepts and experiences in the arts, or change social dynamics. A process is considered creative when it involves divergent thinking, multiple ideas, and new connections.

Nevertheless, the definition of creativity is elusive. Although most scholars agree upon such aspects of creativity as originality, appropriateness, and the production of works of value to society, there is little agreement about the specifics, making it very difficult to research this concept. Two major forms of creativity are recognized, labeled by researchers as “little-c” creativity, which is creative everyday decisions and behaviors, and “big-c” Creativity, which is the kind that changes an entire domain. As many as sixty different definitions can be found in the literature of psychology.

Most current theories of creativity attempt to describe the persons, processes, products, and social systems that bring creative products to light. Robert Sternberg, a psychologist who writes about creativity and intelligence, believes that creativity should not be considered outside the social context. For example, he likens successful creativity to the economic process of “buy low and sell high;” that is, creative people may invest in an idea that initially holds little interest for others, develop it, and then disseminate that idea for great reward or reknown. He describes a dialectic that exists among intelligence, wisdom, and creativity, where intelligence advances existing societal agendas, creativity questions them and proposes new ones, and wisdom balances the old with the new. Mihaly Csikszentmihalyi proposed a systems model of creativity that included the creative domain, which is the symbolic knowledge that is shared by a particular culture or by humanity as a whole; the field, which includes the teachers, mentors, critics, and leaders as gatekeepers, and the individual, who uses the symbols of the given domain to create a new idea, submits it to the gatekeepers, and may receive recognition for the appropriateness or novelty of the idea.

Theresa Amabile claims that creativity can best be understood as a combination of domain-relevant skills, creativity-relevant mental processes, and task motivation. Much of her research has concerned the variable of task motivation; she was the first to show that creativity suffers from “over reward;” that is, when people are paid too much to be creative, they seem to lose the intrinsic motivation that is critical to creativity. Task motivation is the centerpiece, the most important component, in Amabile’s three-component theory. Intrinsic or internal motivation, as opposed to extrinsic motivation that comes from outside sources, is necessary to reach the highest level of creativity. In addition, her work has shed light on creative mental processes such as the capacity to break a perceptual or cognitive set in order to see or think about things in a new way; the capacity to suspend judgment; and the ability to embrace complexities.

Many attempts have been made to measure creativity. Most of the available creativity instruments can identify divergent thinking or ideational fluency but have limited ability to predict future creative behavior. In many cases, children identified by creativity measures have not produced significant creative works as adults. An exception is the lifelong quest of E. Paul Torrance to understand creativity, to describe the cognitive processes associated with creative problem solving, to develop valid and reliable measures of these constructs, and to identify and guide young people using the results of this research. Torrance and his colleagues’ follow up studies of people who were identified as children using his Torrance Tests of Creative Thinking (TTCT) did show that the TTCT was a moderately good predictor of later creative work.

Jonathan Plucker and Mark Runco have described advances not only in the predictive validity of the measurements in existence but, importantly, in the utility of broadening the scope of creativity measurement to include personal definitions and theories of creativity. Weak predictive validity coefficient, they say, may be attributed to weak methodology rather than weak psychometrics, and may include studies too short in duration, inadequate statistical procedures for nonnormally distributed data, and poorly operationalized outcome criteria in longitudinal studies. Moreover, explicit definitions and theories of creativity, while useful in many traditional studies, do not access the wealth of information inherent in individuals’ personal beliefs about creativity. Plucker and Runco suggest that when people engage in creative activity their thoughts and actions are guided by personal beliefs about how to foster and evaluate creativity that may be very different from the theories developed by creativity experts. Creating instruments which correspond well with the implicit theories of the people completing them not only addresses the definitional problem, but yields a socially valid technique for instrument design which is particularly sensitive to cross-cultural and discipline-specific research questions.

Studies of creative individuals flourished since the middle of the twentieth century. At The Institute for Personality Assessment and Research, Donald McKinnon and Frank Barron pioneered methods of identifying, assessing, and interviewing creatively eminent individuals. Torrance’s mentoring led to the establishment of centers for the study of creativity at many universities across the country. The

creation of the journal *Creativity* by Mark Runco provided a forum for well-designed research studies on all aspects of creativity.

Mihaly Csikszentmihalyi's work is the most recent and comprehensive description of creative people. He studied one hundred individuals who had produced works that were publicly acknowledged as creative and who had all changed the culture in some important way. In this comprehensive study of scientists, artists, writers, educators, politicians and social activists, engineers, and religious leaders, he found that the first and foremost characteristic of creative individuals is mastery of a domain of knowledge or skill. Without mastery of a domain, diverse thinking or ideational fluency are not likely to lead to creative products. Second, all creative individuals, according to this research, have the experience of flow when in the act of creation: a sense of challenge, timelessness, and ecstasy.

Unlike earlier studies of eminent people that showed loss and dysfunction in the lives of eminent individuals, the creative individuals in Csikszentmihalyi's study had normal childhoods and families that provided them with a solid set of values. They, however, differed significantly from others in the high proportion of them who had suffered a parental loss, particularly the loss of a father. Commonly, they had other supportive adults in their lives who encouraged them to use their loss as an opportunity to create their own identities. Creative individuals had little good to say about school; in many ways, general schooling was irrelevant to these profoundly curious and self-guided young people. Only in college and advanced training did they find a match between their interests and those of others, in mentors and significant teachers who provided the knowledge they desired so intensely. As adults, these creative people had circuitous paths to their careers. What was most extraordinary, said the author, was that these people seized upon whatever opportunities they had been given and then shaped them to meet their own ends, rather than being shaped by genes or external events.

In addition to Csikszentmihalyi's contributions about parental loss in understanding the importance of context on creativity, certain psychological conditions can highlight or obscure creativity. Although creative individuals often are considered to "live on the edge" and generally choose more independent lifestyles, this may lead to substance abuse and other self-destructive behaviors that dull creativity. It may be that creative people use alcohol because their work, uncertain and plagued by rejection, is difficult, stressful and anxiety provoking. Whether self-medicating as a response to depression or succumbing to a genetic predisposition, creative people often have long periods of time alone to drink and develop addictions without the knowledge of others. Although it has not yet been proven that creativity causes drug use, the pervasive belief that substance use enhances creativity may be the result of inaccurate perceptions; that is, artists may use alcohol in the expectation that it will improve their creativity.

There is also evidence that a high proportion of creative writers, artists, and musicians suffer from symptoms of mood disorders, especially bipolar disorder. Although much of the evidence is correlational, there are several characteristics that are associated with creativity in bipolar disorder that may reflect causal

relationships and which offer direction for further experimental research. These include increased range and speed of associated concepts, perseverance, increased energy, reduced sleep, overt focus on the self, and heightened sexual interests. No one understands fully the connection between bipolar disorder and creativity; however, when creativity is studied in isolation from personality and lifestyle, it is difficult to assess the true capacity of an individual for original production.

In addition to polarities in moods, most creative people seem to hold within the same personality elements that in the normal population are seen as opposites. They may be energetic and yet capable of quiet serenity; playful and yet serious and disciplined about their work; naive in their openness to ideas, and yet smart and practical in applying them; humble in their personal relations and very proud of their work; private and avoidant of the crowd, but eager to express and exhibit their art; and finally, both masculine and feminine in their perception, approaches, and attitudes.

Environmental variables interact in important ways with cognitive and personality variables to produce creative behavior. Although there has been much controversy about whether creative individuals come from dysfunctional or contented families, Barbara Kerr in her studies of happy families and creativity has proposed that dysfunctional families may be associated with flamboyant and intense creativity, and happy families may be associated with a more gentle, sustained creativity. It has long been observed that certain communities at certain times in history seemed to give rise to a great many creative individuals: fifteenth century Florence, the Harlem Renaissance, and San Francisco in the 1960s are examples. The presence of patrons, the support of a subculture of creative individuals, the possibility of freedom of expression, and the availability of materials and resources necessary for creative products all play a part in the emergence of creative behavior in individuals of talent. Gender, race, and class can all be barriers to the expression of creativity when low expectations and stereotypes discourage otherwise talented individuals from pursuing their ideas and fulfilling their gifts.

Positive psychology interventions focus on enhancing both everyday creativity as a strength and nurturing the development of individuals who have potential for extraordinary creative accomplishment. A recent addition to centers of creative research is the Counseling Laboratory for the Exploration of Optimal States (CLEOS) at the University of Kansas. The CLEOS project is based on research on personality variables found to be associated with creative eminence and the research on the optimal environments for fostering the development of creative individuals. Using a profiling method that matches adolescents to the profiles of creative people when they were young in six domains of talent, the CLEOS staff find and guide creative young people toward the activities, educational paths, and careers that seem to allow the most opportunities to experience challenging work, satisfying lifestyles, and the experience of flow.

SEE ALSO: ► Csikszentmihalyi, Mihaly ► Emotional creativity ► Flow  
► Happiness ► Innovation

## Csikszentmihalyi, Mihaly

Jeanne Nakamura

*Claremont Graduate University*

Mihaly Csikszentmihalyi (1934–) has made important contributions since 1998 to the understanding of optimal functioning and to the growth of positive psychology. He was born in Fiume, Italy, where his father served as Hungarian consul. Childhood years shuttling between Hungary and Italy while observing the chaos of wartime, adults' denial, and the disappearance of neighbors and family members were formative. After leaving school at 16 and working in jobs as varied as poster painter, waiter, translator, travel agent, newspaper stringer, and trainer of Boy Scout troop leaders, Csikszentmihalyi turned to psychology for answers to the bewilderment he felt at the behavior of the adults he knew during the war. The decision was influenced by a lecture he happened to attend by C. G. Jung. Csikszentmihalyi emigrated to the US in 1956, arriving in Chicago with \$1.25 in his pocket.

Csikszentmihalyi completed college in 1960 at the University of Chicago while working nights and stayed on to pursue doctoral studies in human development, completing a dissertation supervised by Jacob Getzels on the creative process. During graduate school, he married Isabella Selega; they have two sons and five grandchildren. One son is a digital artist, the other a Han dynasty scholar. After receiving his PhD in 1965, he joined the faculty and subsequently chaired Lake Forest College's Department of Sociology and Anthropology. In 1971, he returned to the University of Chicago, chairing first the Committee on Human Development and later the Department of Psychology. In 1999, he relocated to Claremont Graduate University to establish the Quality of Life Research Center.

Csikszentmihalyi has drawn upon classical European education and interdisciplinary graduate training to put psychological phenomena within sociocultural context and locate contemporary experience within historical and evolutionary frameworks. His goal has been the scientific study of subjective experience, in particular optimal functioning. He is an author or editor of 20 books including *Flow* (1990), which was published in over 20 countries.

He is best known for three lines of work. First, since the 1970s he has investigated the dynamics of intrinsic motivation, identifying and exploring the phenomenon of flow, or the enjoyment of intense absorption in an activity. Second, in the 1970s he and his graduate students developed the experience sampling method (ESM) for collecting ecologically valid snapshots of experience, making a systematic phenomenology possible. Csikszentmihalyi and colleagues have employed the ESM to map the daily lives of working adults, teenagers, and families; the experience of specific activities such as television viewing; and the nature of specific subjective states, particularly flow. Finally, he has studied creativity, talent development, and aesthetic experience, modeling creativity as both a cognitive and a systems (social-cultural) process.



Csikszentmihalyi began two collaborative projects in the mid-1990s. With Howard Gardner and William Damon, he has studied “good work” in professional life – work that is ethical, excellent, and personally fulfilling. Since 1998, he has helped foster positive psychology. He coedited its inaugural publication with Martin Seligman, a special issue of *American Psychologist*, and chaired the US’s first international Positive Psychology Summit.

SEE ALSO: ► Experience sampling method ► Flow ► Seligman, Martin

## Cultural Pluralism

Debbiesiu Lee and Blaine J. Fowers

*University of Miami*

*Cultural pluralism* refers to the affirmation of cultural diversity in all its forms in a society. This concept expresses the central idea that “persons and groups having plural, varied and dynamic cultural identities should live together in harmonious interaction and proper accord” (UNESCO, 2006). Cultural pluralism is distinct from cultural diversity in that the latter refers only to the representation of peoples of different cultures residing in the same locale. Whereas cultural pluralism is an idealized goal, the latter is a stated fact. Cultural pluralism frees people to practice their way of life without undue pressure to assimilate into a majority culture, or to suffer significant loss of their culture.

The conversation on psychology’s role in the advancement of cultural pluralism has been multivocal and multifaceted. Historically, psychologists have explored how to increase the representation of ethnic minority psychologists, to include cultural considerations in psychological theory, to improve therapeutic interventions with culturally diverse clients, and to facilitate inclusiveness in the general public. More recent attention to cultural issues in psychology has been focused on developing guidelines for cultural competence, understanding processes associated with the development of various cultural identities (race, ethnicity, sexual orientation, gender), and identifying factors that foster resilience and empowerment in historically oppressed populations. Despite the shared vision of a pluralistic psychology, these topics have been approached from different perspectives, sometimes fundamentally at odds with one another. For instance, in an effort to remedy the inappropriateness of using traditional European-based therapies to help ethnic minority populations, some multicultural experts have argued for the development of indigenous therapies, approaches that are culture-specific. Others created *multicultural therapy*, which is described as a meta-therapy to address how traditional theories may be modified or changed to better suit members from different cultural groups. While indigenous therapies require abandoning current treatment models in favor of creating culture-specific models, multicultural therapy uses existing models as a foundation for the treatment of culturally diverse populations.

Specific recommendations about how psychologists should pursue cultural pluralism have also been approached from different viewpoints. Multicultural experts who created the professional guidelines for cultural competence emphasize the importance of possessing culture-specific awareness and knowledge about oneself and others. The ability to skillfully interact in a culturally competent manner is also a critical trait in their view. On the other hand, racial identity theorists posit that cultural competence is dependent upon racial identity development. Through experiences with culturally similar and different others, individuals advance through stages of racial identity that ultimately lead to *autonomy*, or racial-cultural integration. Autonomy occurs only after careful consideration of the pros and cons of their own and others' racial-cultural groups. Virtue ethics has also been applied to support cultural pluralism, through *openness to the other*. This virtue is characterized by people who engage in ongoing transformation through the process of comparing, contrasting and questioning themselves in relation to the other.

Given the broad spectrum of these discussions in both content and perspective, it is difficult to glean an integrated, unified vision of cultural pluralism. However, each position highlights an important possibility in the attainment of cultural pluralism. Through the iterative process of assertion and critique, psychologists are uncovering the strengths and weaknesses in their ability to comprehend what is required for cultural pluralism. Each of these arguments shed light on the complexity of human interaction and relationship. Although these discussions often lead to more questions than solutions, it is clear that within the diversity of perspectives and experiences, psychologists are seeking unity in actualizing cultural pluralism.

Most authors in this area agree that the key to progress in this endeavor is to recognize that this is a highly complex domain with multiple perspectives. Underlying each of these approaches to cultural pluralism is the need for self-reflexivity, (people's ability to honestly examine themselves and their relation with others), as well as the capacity to be open to learning about and from the other through dialogue. Respectful, open-minded dialogue among these perspectives includes both asserting one's viewpoints, considering the notions of others, and critically evaluating one's own assumptions in light of that interchange. This dialogue is devoted to "promoting social goods including mutual understanding, mutual affirmation, cooperation, inclusion, equity, and social justice" (Fowers & Davidov, 2006, p. 584).

Fowers and Richardson (1996) summarize three main benefits of "cultural dialogue." First, by contrasting perspectives and practices of different cultures, meaningful patterns emerge wherein both cultures become better defined. Further, both parties are confronted with the fact that their interpretations are not absolute. Second, in the process of people articulating their viewpoints, they can examine "the particularity of [their] cultural view" that they previously "have taken for granted as true and right" (p. 620). Third, cultural dialogue fosters reflection on one's cultural "practices and ideals as they are contrasted with those

of another culture” (p. 620). In sum, people come to understand themselves better through their interaction with others. Through the eyes of another, people uncover cultural strengths and vulnerabilities and more clearly understand their identities. They become more conscious of their experiences, and the interpretive lens through which they view those experiences. They can both better appreciate and question the values and truths they hold most dear.

Beyond the personal, the global stakes are high surrounding this work, with world peace or world destruction being ultimate outcomes. According to Sacks (2002), “the greatest single antidote to violence is conversation, speaking our fears, listening to the fears of others, and in that sharing of vulnerabilities discovering a genesis of hope” (p. 2). By participating in the conversation about pluralism, people are taking responsibility for their role in the future of humanity. As Csikszentmihalyi (1997) noted, “an active responsibility for the rest of humankind, and for the world of which we are a part, is a necessary ingredient of the good life” (p. 132). Continued internal examination and intercultural dialogue promises can foster the greatest of human conditions, the shared vision of a harmonious world that can draw on the resources of many forms of life to create human societies rich with possibilities. Given the open-endedness of dialogue and human creativity, it is impossible to predict exactly what such a world would look like, but it seems clear that finding a way to live creatively with the central tension between identity and difference is indispensable.

Despite the potential benefits of engaging in cultural dialogue, it is difficult to do so. There are many explanations for this. Psychologists have identified a strong, automatic tendency toward an in-group bias in perception, cognition, and affect. Members of one’s group are viewed more favorably, differences in appearance and custom are regarded with suspicion, and negative attributions are frequently made about out-group individuals. At the extreme, outgroup individuals may be seen as subhuman and ineligible for respect and fair treatment. Psychologists have documented that people of color are seen by the dominant culture with fear, mistrust, or wonderment. With this mindset, people are able to ignore each other’s humanity and treat the “other” as an enemy. The reciprocal phenomenon of “healthy cultural paranoia,” occurs when members of historically oppressed groups respond with suspicion towards members outside their race. In general, people report feeling most comfortable interacting with others whom they assume have common goals and shared interests, interpretations and experiences.

In addition to basic mistrust of the other, the emotional requirement and feared consequences of cultural dialogue may also impede genuine conversation. Many individuals carry with them painful experiences related to their race that may be difficult to share with others. The interpersonal consequences may also be an inhibiting factor, such as fear of appearing racist, fear of being misunderstood or invalidated, or carrying the burden of inadvertently hurting or offending another despite one’s best intentions. Similarly, it may be painful for people to consider how they may have personally benefited from unfair social practices, and how others may have been disadvantaged. People have an attachment to viewing

themselves and being viewed as “good,” and an active avoidance of being labeled “bad.” Since cultural dialogue places people in the position to have their values and perspectives questioned, they may experience a great deal of threat. These factors render cultural discussions deeply challenging, requiring those who engage in such dialogue to exercise courage, emotional strength, personal integrity, and ongoing commitment to the goals of pluralism.

These experiential sources of discomfort with cultural pluralism are important, but some individuals and groups disagree with the emphasis on cultural pluralism. Some people downplay pluralism in favor of emphasizing universals about humans, arguing that cultural particulars are trivial. Others claim that there are culturally superior ways of life and that pluralism inaccurately levels all ways of life, and may even lead to a destructive relativism. Experts on cultural pluralism often see the source of such perspectives in the discomfort and uncertainty that is inevitable in cultural pluralism. Be that as it may, it is important to recognize that complete consensus has not been reached on the desirability of cultural pluralism within psychology or contemporary societies.

Cultural pluralism has great promise, but it also requires us to live with questions that have no final answers and tensions that cannot be definitively resolved. There are many ways to address the identity-difference tension. Foremost among them is to develop the recognition that identity only arises through contrast with others who are different. One of the chief dangers of cultural pluralism is devolution into a tribal mentality that is overly focused on exclusionary and defensive identity politics. The complementary risk has been expressed in terms such as color-blindness and human universals that attempt to erase cultural differences. Tribalism promises only division and endless conflict, and the attempt to eradicate difference through universals flies in the face of the particular attachments and customs that help to constitute people as human beings and to which people are profoundly tied. This dilemma suggests the need for developing the kind of maturity that allows individuals and groups to be firmly rooted in their own way of life and yet approach alternative ways of life with openness and interest.

Another lively tension emerges between the shared aspects of our humanity and the particularistic ways cultures have of responding to human opportunities, needs, and dilemmas. It will not do to simply claim that all humans are fundamentally the same and ignore the ways in which culture helps to constitute individuals and groups. Nor can we disregard the common possession of reason, curiosity, hope, dependence, and frailty even though these aspects of humanity are manifested in so many different ways.

Cultural dialogue offers a vital alternative to violence, but it does not obviate intercultural conflict. Indeed, dialogue is often characterized by substantial disagreement and can begin in a deeply contentious manner. Dialogue thus entails a tension between the desire for mutual understanding and affirmation in principle and a *de facto* dispute that does not admit of a clear resolution in the foreseeable future. Dialogue can lead to mutual accommodation, but at times, an acceptance of difference and disagreement – an agreement to disagree – may be

the only course that allows people to live with unresolved differences for the sake of the larger shared goals of mutual understanding and affirmation. Given the inescapability of these questions and tensions, it may be helpful to accept them and develop harmonious and productive ways to live with them rather than to try to force some form of ultimate resolution. Psychologists have begun this process by identifying the foundations of creating a culturally pluralistic world, namely cultivating the capacities for open-mindedness, ongoing dialogue, and respectful reflection of one's own and other's cultural commitments.

As the dialogue continues in psychology, understanding of the nuances of cultural pluralism becomes more sophisticated and refined. These developments have arisen with the growth of the subfield of cultural psychology, including the study of cultural differences in behavior, customs, and interaction; research on different understandings of well-being and its sources; and the cross-cultural study of topics such as altruism, emotional development, conflict resolution, empowerment, and forgiveness. Valuable lessons may also be drawn from the currently expanding research on the intersections of identity, for instance, examining the processes whereby individuals who identify with seemingly conflicting identities (such as gay Catholics) reach a state of internal peace and self-acceptance.

Indigenous perspectives also lend important wisdom to the dialogue. For example, White and Cones identified five strengths African American people have cultivated, including improvisation, resilience, connectedness to others, the value of direct experience, and spirituality. The development of these characteristics has evolved, according to White and Cones (1999) through, "three central forces: the residuals of African culture, the effects of slavery and continuing oppression in America, and partial assimilation into Euro-American society" (p. 48). Cultural groups can benefit from learning about the heroics of other cultural groups. Through increased appreciation for the particulars in which human strength is manifested within cultural contexts, psychologists may better understand how to create conditions supportive of cultural pluralism.

Cultural pluralism has further been supported by social psychologists, who have advanced sophisticated paradigms and methods of people working together to promote a shared vision of the world. According to Jones (1997):

We need to acknowledge the diversity within groups that helps to break down group boundaries. We need to identify the principles among us that promote unity. And, we need to respect the differences between groups and find those instances of interactions with other groups that demonstrate that differences can be a source of positive and rewarding experiences. (p. 536)

To do so would be to introduce the possibility of "creativity, a broader information base, and ultimately, the wherewithal to not only tolerate but appreciate and benefit from our human diversity" (Jones, 1997, p. 537).

Cultural traditions contain accounts of what human beings are and what it means to live a flourishing life, and therefore provide important areas of intersection with

positive psychology. Vital questions arise at this confluence, principally the matter of human universals versus cultural particulars. Whereas positive psychologists generally favor universal factors in their explanations of well-being and view culture as a particular set of explanatory variables, cultural pluralism emphasizes the ways in which cultures shape individuals and groups according to their traditions. Cultural pluralism does not view culture simply as one or even a set of variables that affects an individual or group's behavior. Rather, culture serves to complete the person, to define the group, and to articulate the vision of the good life.

The ongoing dialogue between the sub-disciplines of psychology exploring the debate between the importance of universal experience and cultural particulars advances the sophistication of our understandings in these areas. The more we learn about and examine the universals (what exists among all cultures), the more we can appreciate the concrete particulars (the differences that exist between cultures), and vice versa. Although we may be similar in our quest for understanding and perhaps improving human behavior and condition, we differ in how to best approach this common good. Inasmuch as we appreciate where we diverge in our perspectives and efforts, we respect the uniqueness of our contributions. Further, as psychologists come closer to manifesting cultural pluralism in future endeavors, so does the world as people benefit from our work and modeling. The degree to which we are able to fully appreciate and cultivate this dialectic serves as a measure of how well we embody the core of cultural pluralism. Ongoing research will no doubt help us to expand our knowledge of cultural universals and particulars, but the challenge of cultural pluralism requires us to develop our maturity and expand our humanity at least as much as our knowledge.

SEE ALSO: ► Cultural values ► Culture ► Peace

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## Cultural Values

Lisa M. Edwards and Keyona M. Jarrett

*Marquette University*

Cultural values are the aspects of life which a group views as important and desirable. These values reflect the goals, morals, and wishes of a group, such as the way one should live, the priorities one should have, and the understanding that one has about one's place in the world. Cultural values can be influenced by various features of the environment and history, including socioeconomic status, gender, race/ethnicity, geographic location, acculturation level, and religion.

Members of cultural groups often share common values, attitudes, and behaviors. However, within any group there are differences in the amount to which an individual adheres or espouses a particular value. For example, Mexican Americans, African Americans, and Chinese Americans may share cultural values that reflect mainstream US culture, but they may also possess cultural values that are unique to their ethnic group and background.

Many cultural values have been noted by anthropologists, psychologists, sociologists and others who study humans, culture and social interactions. Some of the most common include individualism and collectivism, time orientation, familism, and religion/spirituality.

One of the most commonly discussed cultural values is individualism and collectivism. Individualism, which is most common in Western society, is reflected by a belief in independence and self-determination. In individualistic cultures, members value individual success and uniqueness, and self-reflection, self-awareness, self-actualization, and self-fulfillment are vital to the optimal functioning. In contrast, collectivism, which is most often observed among Eastern cultures, refers to a sense of interdependence and cooperation. Members of collectivistic cultures value social harmony over individual accomplishment, and may compromise their personal goals for the benefit of the group.

Orientation to time is another cultural value that differs across cultures and groups. Some cultures tend to think about time primarily in a past sense, which is reflected in their practice of storytelling and drawing values from tradition and history. Other cultures tend to be present-oriented, with more awareness of the present moment and less focus on the past or future. Finally, some cultures, such as Western societies, tend to be more future-oriented. These individuals plan and focus on goals in the future.

Familism, or the importance of family, is also considered a cultural value. Familism is expressed by a strong sense of loyalty and identification with one's family, and in many cultures this includes extended family such as grandparents, cousins, and uncles and aunts. Those with a high sense of familism may make decisions based on the needs of the family or a sense of obligation to the family unit. In addition,

when possible these individuals engage in many activities and sometimes live near family members.

Religion and spirituality are an integral part of life for many individuals, and thus greatly contribute to their cultural values. For example, many members of Latino, American Indian, Asian American and other ethnic groups value religion and spirituality and this is embedded in their identity and fundamental to their overall well-being, as well as how they create meaning in the world. Individuals of ethnic groups in which religion is a main focus are taught the importance of religion at an early age and it becomes a part of their cultural values and orientation to the world.

While misunderstandings can occur when individuals or groups with different cultural values communicate and coexist, as society becomes increasingly diverse individuals have the potential to learn a great deal about others' values. Some researchers have noted that certain cultural values may help individuals of certain groups cope with challenges faced by their cultural group. For example, a sense of familism may help an individual who is enduring discrimination or cultural oppression.

The measurement of cultural values can be challenging due to the complex nature of many of these variables. The danger of overgeneralization exists when discussing and measuring values, since the beliefs of some individuals may not be representative of a larger group. In addition, because culture and societies change over time, assessment strategies may need to be modified. Longitudinal studies that capture change in values over time might be particularly useful to understand how beliefs and goals of groups vary across contexts and time.

SEE ALSO: ► Ethnicity ► Familism

## Culture

Glenn Adams and Phia Salter

*University of Kansas*

Definitions of culture vary across academic disciplines and theoretical perspectives. Within psychology, there is a tendency to define culture as the traditional customs, beliefs, values, and norms of a substantive (typically ethnic) group. However this description is problematic to the extent that it equates culture with group, which is not always the case. Paraphrasing Kroeber and Kluckhohn (1952, p. 357), we define culture as *explicit and implicit patterns of historically derived and selected ideas and their material manifestations in institutions, practices, and artifacts; cultural patterns may be considered both products of action and as conditioning elements of further action*. The primary benefit of this definition is that it locates culture not in group membership, but instead in the patterned worlds that are sometimes (but not always) associated with group membership.



## Culture as Patterns

There are three noteworthy features associated with a definition of culture as patterns.

### Explicit and Implicit Patterns

The first noteworthy feature is that culture is not limited to the explicit, well-defined value orientations or ideological traditions to which people generally refer when discussing culture. In addition, culture includes more implicit, diffuse associations and affordances that are embedded in aspects of everyday life. *Everyday life* refers not only to religious practices, residence patterns, and other forces that are typically regarded as *cultural*, but also to forces, like economic insecurity or interactions with global capitalism, that are often regarded as *noncultural*.

### Temporal Dynamics

A second noteworthy feature is that cultural patterns are historically derived and selected. They do not represent a static, defining essence, but instead emerge dynamically through an evolutionary process. One implication of this feature is that those cultural patterns that persist into the present typically reflect some of the time-tested wisdom about local realities. Even if one does observe patterns that appear to be maladaptive (for either individual or collective well-being), it is often possible to see these patterns as part of a larger system that is generally adaptive.

### Mutual Constitution

Finally, this definition portrays the psychologically relevant aspect of culture as a dynamic process of mutual constitution; in short, culture and psyche “make each other up” (Shweder, 1990, p. 1). One direction of this process emphasizes the cultural grounding of psychological experience: the particular constructions of reality that underlie observed patterns of psychological experience. The other direction of this process emphasizes the dynamic construction of reality: the role of psychological activity in the reproduction, maintenance, and extension of those underlying cultural patterns. Cultural patterns are products of action at one moment, and conditioning elements of further action in the next.

## Problems Associated with a Conception of Culture as Group

A concept of culture as patterns contrasts with the tendency, prevalent in much of psychology, to define culture as the traditional customs, beliefs, values, and norms

of a substantive (typically ethnic) group. In general, the problem with a conception of culture as *group* is that it implies a framing of cultural involvement as *membership*. From this perspective, culture exerts influence to the extent that one is a member of the associated cultural group. Clearly this implication is incorrect. One need not be a member of a cultural group to engage and be shaped by patterns associated with a cultural space. For example, one need not be Protestant, a youth, Black, or American to be shaped by Protestant, youth, Black, or American cultural influences.

More specifically, the problem with a conception of culture as group involves its association with “the other.” On the infrequent occasions when researchers examine phenomena in cultural communities that are typically underrepresented in psychological research, there is a tendency to interpret any observed deviations from mainstream literature in terms of the defining, cultural essence of those communities (i.e., “Those people behave the ‘strange’ way that they do because their culture makes them different”). The most obvious negative consequences of this view of others are perceptions of outgroup homogeneity and the reproduction of cultural stereotypes. In addition, by locating cultural difference in “others,” this style of explanation obscures the cultural grounding of *mainstream* patterns. Although accounts of psychological functioning in mainstream scientific journals typically fail to mention cultural processes, the patterns that they report are not “just natural.” Instead, these patterns are rooted in particular constructions of reality – for example, nuclear family residence, social and spatial mobility, affluence, and other features of “modern,” middle-class, typically North American worlds – that also require researchers’ attention to render them visible. In either case, a conception of culture as group promotes this phenomenon of othering by contributing to the *reification* of culture: that is, portraying dynamic, flowing patterns as if they were static, essential properties of rigid, highly entitative groups.

## **Beyond Definitions: A Cultural Approach to Positive Psychology**

The defining feature of the positive psychology movement is a turn away from an exclusive focus on pathology and psychological weaknesses to consider well-being and psychological strengths. A cultural perspective in positive psychology – and particularly a focus on the mutual constitution of cultural environment and psychological experience – contributes to both of these goals. In one direction of the mutual constitution dynamic, a cultural perspective contributes to less pathologizing accounts of human experience by illuminating the cultural grounding of both observed response patterns and mainstream accounts of these response patterns. In the other direction of the mutual constitution dynamic, a cultural perspective suggests that one can draw upon cultural patterns (as a human strength or resource) to engineer worlds that promote optimal experience.

## Cultural Grounding of Psychological Science

A cultural perspective emphasizes that the influence of cultural stuff on human psychological experience takes place at the beginning. Children do not develop in cultural-general worlds, but rather in particular worlds that are culturally patterned. Rather than something that happens on top of or after basic experience, culture resides in everyday worlds that condition basic experience. As a result, one cannot get to allegedly basic, psychological reality by subtracting or separating out cultural stuff.

An important implication of this idea is that, despite claims to the contrary, the instruments, constructs, and methods of psychological science are not natural reflections of some culture-general world. Instead, the construction of and interpretation of scientific evidence reflects the cultural patterns of particular worlds (usually associated with middle-class North American university students of European descent). For example, researchers have observed that students in Japanese settings score lower on the Rosenberg self-esteem scale or report less happiness than American university students. Based on these patterns of difference, one might conclude that Japanese students suffer from a deficit of self-esteem, happiness, or well-being in general. One might then impose an intervention designed to increase Japanese students' self-esteem, happiness, and well-being.

A cultural perspective suggests that this conclusion and response are problematic. First, a cultural perspective suggests that concepts and measures of self-esteem or happiness are not culture-general (or *etic*), natural phenomena, but instead reflect culture-particular (or *emic*) constructions of self, relationship, emotion and research practice. Transporting these particular concepts and measures and imposing them as culture-neutral, universal standards in settings where they may not apply (i.e., an *imposed etic*) can result in mischaracterization and pathologizing accounts of other people's tendencies in terms of deficits (e.g., Japanese lack self-esteem or happiness). A cultural perspective promotes less pathologizing accounts by highlighting the particular, cultural grounding of mainstream concepts and measures.

Second, a cultural perspective suggests that the conclusion in the above example regarding self-esteem of Japanese students is problematic because it neglects the American-student side of the cultural difference. This neglect implies a construction of American-student patterns as a default or natural standard from which cultural others (in this case, Japanese patterns) represent an abnormal or unnatural deviation. Rather than taking American patterns of high self-esteem and self-reported happiness as a default natural standard, a cultural perspective suggests that one (a) treat these response patterns as phenomena that require explanation (i.e., higher than natural self-esteem and happiness) and (b) consider the particular constructions of reality that underlie these response patterns. In this way, a cultural perspective contributes to a less pathologizing understanding of psychological phenomenon by turning the analytic lens away from an exclusive focus on cultural patterns of other settings to focus on the typically

invisible cultural patterns that underlie tendencies observed in the mainstream of the field.

### Cultural Identity as a Resource.

Besides providing a less pathologizing account of psychological experience, a cultural perspective directs attention to the reproduction of everyday worlds that promote optimal psychological experience. Of particular note is the idea of cultural identity as a resource. In recognition of the potential for cultural identity to provide symbolic resources that promote well-being and achievement, many communities create festivals and special events that celebrate cultural heritage. However, the idea of cultural identity as a resource extends beyond ethnic pride and the occasional sharing of traditional food, dress, and customs. In addition, it includes an active “recovery of historical memory” and “the reconstruction of models of identification that, instead of chaining and caging the people, open up the horizon for them, toward their liberation and fulfillment” (Martín-Baró, 1994, p. 30). For example, constructions of indigenous peoples’ identities that recognize (rather than repress) collective memories of historical injustice may alert people to the possibility of present injustice; provide alternative, less victim-blaming explanations for present difficulties; and provide important bases for collective action and experience of collective efficacy. In this way, a cultural perspective contributes to the positive psychology goal of liberation from oppression.

SEE ALSO: ► Cultural pluralism ► Cultural values ► Ethnic identity  
► Ethnicity

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## Curiosity

Todd B. Kashdan<sup>a</sup> and Paul J. Silvia<sup>b</sup>

<sup>a</sup>George Mason University; <sup>b</sup>University of North Carolina at Greensboro

Feelings of curiosity can be defined as the recognition, pursuit, and intense desire to explore novel and challenging information. When people feel curious,

they devote more attention to the activity, process information more deeply, remember information better, and are more likely to persist on tasks until goals are met. The immediate function of curiosity is to learn, explore, and immerse oneself in the activity that initially stimulated the person's interest. Across the lifespan, curiosity serves a broader function of building knowledge, skills, relationships, and expertise. After all, a person spending time with novel stimuli is exposed to some degree of information and experience that was not previously available.

Some consideration has been given to facets of curiosity. *Epistemic curiosity* reflects how people are stimulated by incomplete, incoherent, or uncertain knowledge (e.g., discovering how things work, conceptual puzzles, mystery novels). *Perceptual curiosity* refers to visual, auditory, or tactile stimulation leading to novel or challenging sensory experiences (e.g., aesthetic appreciation of music or art, foods, strange sounds or smells). *Social curiosity* reflects how people overtly (e.g., seeking people out for conversations) or covertly (e.g., gossip, spying) seek to learn more about other people. People also differ in their willingness to take risks to obtain moments of novelty and uncertainty or to avoid the pain of boredom. This mode of curiosity, termed *sensation-seeking*, includes socially desirable actions such as enjoying unusual art forms, meeting new people, and trying new entrées at restaurants, as well as less socially desirable actions such as drug use, gambling, risky sexual activities, and aggression.

There are a number of theories of why people feel curious. In his landmark work, Berlyne suggested that new, complex, and surprising things activate a reward system that generates positive affect. People experience curiosity and explore stimuli when there is a moderate level of objective novelty, uncertainty, or complexity. In contrast, people are prone to anxiety and avoidance when there is too much novelty and challenge, and boredom or apathy when there is not enough. One of the problems with this account is that novelty and challenge aren't objective and universal; instead, they vary according to prior knowledge and experiences, interests, tolerance of uncertainty, and social cognitive processes such as self-efficacy. Other theories suggest that strong feelings of curiosity arise when people become aware of a discrepancy between what is known and unknown and find it desirable to reduce this knowledge gap. A problem with this approach is that it is often unclear what information is available in a given situation and thus whether one deviates from it. A knowledge-gap model works better for epistemic activities when knowledge can be quantified (e.g., sections of an incomplete jigsaw puzzle) than for sensory activities where there is often no ideal information set (e.g., the unusual scent of a new romantic partner).

A contemporary explanation for why people become curious is how people evaluate events. People prefer to engage in situations that match their perceived abilities to understand them. Appraising an event as novel and challenging would only lead to intense and enduring curiosity if people believed they had the competence to understand the event. Recent experiments show that curiosity, measured by self-reported interest or by the duration of exploratory action, is high when

people appraise an event as new and complex but also as comprehensible. Complex but incomprehensible events, in contrast, are experienced as confusing or aversive.

## **Distinctiveness of Curiosity**

Curiosity has a unique role within the psychology of positive motivational and emotional constructs. Curiosity has much in common with positive emotions such as happiness, but it has distinctive features and functions. The core of curiosity is exploration in response to novelty and challenge, so curiosity is oriented to what is new, unfamiliar, and unexpected. Because new, unfamiliar things may turn out to be unrewarding, it is essential that people can be curious about potentially unpleasant events. Happiness, in contrast, comes about in response to events that further goals and satisfy needs. As a result, happiness builds bonds to people and actions that have satisfied goals in the past. In an intriguing analysis, Tomkins argued that the functions of curiosity and happiness can coincide or conflict. Curiosity and happiness can reinforce each other, such as when curiosity motivates people to try something new and the new activity turns out to be enjoyable. In this case, happiness rewards the exploratory action motivated by curiosity. In other circumstances, however, curiosity and happiness can conflict, such as when people face a choice between a novel option and a familiar option that was rewarding in the past. Curiosity motivates people to go to a party to meet new people, whereas happiness motivates people to spend time with friends who are always fun to be around. Consistent with Tomkins's analysis, many experiments have found that curiosity and happiness have different causes and consequences.

## **Individual Differences in Curiosity**

All human beings are familiar with the experience of curiosity, but people differ in their preference for novel and challenging activities, the tendency to actively pursue these activities, and the breadth of activities that stimulate their interest. A great deal of work has been conducted on individual differences related to curiosity. Highly curious people are defined by intense and frequent feelings of curiosity and thus, testable predictions can be made about their dominant appraisals. Curious people evaluate events in ways that foster the experience of curiosity. At the core of individual differences in curiosity is the (a) recognition and appreciation of novel and challenging events and (b) competence beliefs about the potential to understand these events.

Psychologists have examined traits associated with curiosity, such as openness to experience and the need for cognition. Other examinations have focused on lower-order, specific traits. Trait curiosity models have had a renaissance recently. According to these mid-range models, trait curiosity explains variance

not accounted for by higher-order factors like openness and need for cognition, so trait curiosity is an appropriate level for examining curiosity. Some trait curiosity models propose lower-order facets of curiosity, such as perceptual, epistemic, social, and sensory curiosity.

## Some of the Benefits of Curiosity

Curiosity is relevant to nearly all human activity ranging from leisure, creativity, decision-making, and social relations to education, sports, work, and self-insight. By fully engaging in varied and novel activities, a curious person is guaranteed a stretching or expanding of their knowledge, skills, and competence. Upon investing time, effort, and energy in activities that are intrinsically valued, curiosity facilitates personal growth and learning. In addition to these personal resources, feelings of curiosity can build social bonds by promoting behaviors such as responsiveness and flexibility to others' varied experiences and perspectives. On average, people enjoy spending time and developing friendships with people who are interested in them and what they say and do. Arguably, being curious and expressing it to other people is a critical ingredient in the formative stages of relationship development and the maintenance of excitement and passion in long-term relationships.

Another function of curiosity is to motivate and sustain interest in important but relatively painful activities. For those activities that are intrinsically interesting, a person is likely to persist and enjoy themselves without any further consideration or intervention. For those activities that are not inherently interesting or enjoyable but are important to take part in for other reasons (such as spending time with narcissistic relatives to placate your parents), a person can transform the activities by making them more interesting (such as making a game out of it or bringing someone else to savor and laugh about the uncomfortable moments at a later date). Attempts to self-generate curiosity in mundane or painful activities can effectively sustain motivation and increase goal effort and progress.

Curiosity is associated with an increasingly large number of beneficial outcomes. This includes greater emotional well-being, perceived meaning in life, vitality, intelligence, perceived competence and control, awareness and understanding of emotions, creativity, aesthetic appreciation, tolerance and even preference for anxiety, ambiguity, and stressful challenges, and less negative emotions, authoritarianism, and reliance on stereotypes and dogmatic thinking. People who are more curious tend to achieve and perform better in academics, work, and sports (even after accounting for how intelligent, athletic, or social they are). They also adjust better to school and job-related changes and are generally more satisfied and have better relationships with other people. There are a few studies that have even shown that older adults who are more curious live longer (even after taking age, sex, and physical health into consideration). Ultimately, curiosity is about

thriving on novelty and challenge. This orientation often brings people in contact with great pleasures and risks – in some cases, at the same time. As the science accumulates, it becomes increasingly difficult to ignore the role of this exploratory orientation in living an engaging and meaningful existence.

SEE ALSO: ► Open-mindedness ► Positive emotions ► Well-being



# D

## Deep Learning

Eileen Hulme

*Azusa Pacific University*

Deep learning describes an approach to learning that is characterized by active engagement, intrinsic motivation, and a personal search for meaning. Deep learners actively seek a significant conceptual understanding by connecting new concepts with previously held knowledge. They rigorously evaluate evidence, examine logic, and critically analyze hypotheses and conclusions. Conversely, surface learning is a more passive process involving the memorization of seemingly unrelated bits of information. Surface learners are motivated by the meeting of minimum requirements and the completion of tasks.

## Historical Antecedents

Swedish researchers Marton and Saljo used the terms *deep* and *surface levels of processing* to describe the differences in the way students understand a text. They later amended their terminology from levels of processing to *approaches to learning* in order to indicate not only the process of learning, but also the intention. In their earliest studies of approaches to learning, Marton and Saljo found that students utilizing a deep level of processing focus on what is significant within a text, i.e., they are interested in discovering what the author intended to say. Students who use surface level processing, on the other hand, learn the text itself and employ a rote learning strategy. Their emphasis is on reproducing the text rather than understanding the essence of the text.

In addition to the concept of deep and surface learning, another category of approach has emerged and is referred to as either *strategic* or *achieving*. A learner

employing this approach is highly interested in achieving good grades and in ego enhancement.

A phenomenographical approach was initially used by Marton and Saljo to portray the experiences of students engaged in studying. Subsequently, diagnostic questionnaires were developed to identify the approach to learning that a student may be using in a particular context. The original, widely used questionnaires were the Study Process Questionnaire (SPQ) developed by John Biggs and the Approaches to Studying Inventory (ASI) developed by Noel Entwistle. Both instruments have had significant revisions, resulting in the 2-factor revised Study Process Questionnaire (R-SPQ-2F) by Kember, Biggs and Leung and revised Approaches to Studying Inventory (RASI) developed by Entwistle and Tait.

### The Process of Studying

Deep learning was first examined through a series of studies designed to understand the strategies employed by students when studying. Students utilizing a deep approach to learning spend more time studying and are more likely to find the material interesting. They attempt to extrapolate meaning from the text, interact with the arguments presented, and determine if the arguments presented are justified by the evidence. Students employing a surface approach focus their attention on rote memorization of material, which leads to a reduced level of interest and less time invested in studying.

### Effect of Teaching Activities

Deep learning is not solely dependent on the intrinsic orientation of the learner. Early research indicates that teaching activities may encourage the adoption of either a deep or surface approach to learning. Examinations that require a high degree of rote memorization and lack an element which allows for independent, critical analysis lend themselves to the adoption of a surface level approach to studying. Learning strategies are context dependent, and students may utilize a deep approach for one subject and a surface approach for another. However, students who primarily employ a deep approach to learning are drawn to courses that encourage discussion, allow students to follow their interests within the subject, link ideas and applications in lectures, and provide assessment opportunities that encourage an engagement of critical, independent analysis. Teachers utilizing primarily an information transfer approach promote surface approaches to learning.

## Major Dimensions of the Topic

### Learner as Active Agent

Deep learners are intrinsically motivated and understand themselves to be conscious agents of knowledge and understanding. They search for the personal

relevance of the task without external prompting. Surface learners, on the other hand, require an extrinsic motivating factor, e.g., meeting the minimum requirements of a course, to stimulate learning at a shallow level.

### Integrative Learning

Deep learners view knowledge as connected and holistic. Knowledge builds upon existing meaning schemes to produce a coherent framework for life. Surface learners see information as discrete bits of information to be memorized and retrieved at the appropriate time. Information that is discrete and unrelated to existing cognitive schemes is generally not well retained and is meaningless.

### Mindfulness Relationship

In recent writings on the nature of learning approaches, deep learning has been compared to concept of *mindfulness*. Mindfulness as defined by Harvard psychologist Ellen Langer is an approach to life that encourages the continuous formation of new mental categories, a willingness to be continuously learning, and an appreciation for multiple perspectives. Deep learning engages a high degree of mindfulness by encouraging learners to take a holistic approach to learning. This type of approach encourages linkages of knowledge that ultimately support the formation of new mental categories and the integration of various perspectives.

## Problems Associated with the Topic

The use of the deep/surface metaphor has been criticized for its dualistic simplicity and static nature because the breadth of the categories does not adequately describe the complex learning process that students employ. Student approaches to learning are affected by their educational background, personal histories, and teacher perceptions, as well the content and context of the task.

SEE ALSO: ► Academic achievement ► Constructivism  
► Goals and goal-setting theory ► Mindfulness

## Developmental Psychology

Jeanne Nakamura

Claremont Graduate University

Developmental psychology describes and explains change, or growth, over the life-span. It studies the course of development in multiple domains – cognition, social functioning, emotion, personality, biology, motivation. Insofar as it has studied

progressive transformation toward higher states of functioning, it stands to enrich positive psychology. Insofar as it has focused on normalcy and developmental psychopathology, it stands to be enriched by positive psychology's study of human flourishing. Developmental psychologists have studied positive change as the growth of competence in particular domains; the sequential reorganizations of psychological structure at increasing levels of complexity; and the negotiation of the challenges and tasks that become salient during each successive period of life.

## **Evolving Perspectives in Developmental Psychology**

In the US, the study of development emerged during the late-1800s, shaped by societal concerns about childrearing and child welfare and an intellectual milieu influenced by biological and evolutionary perspectives. Gesell and other early developmental psychologists focused on measuring and describing the ages at which children normally achieved milestones in mental and physical development, generally adopting the template of biological maturation. Only after the establishment of gerontology, and the aging of the samples from large-scale longitudinal studies of childhood and youth, did developmental psychology move toward a lifespan perspective. Indeed, in the US, developmental psychology often continues to denote the study of infancy and childhood. In contrast, Baltes pointed out that German developmental psychology emerged over a century earlier, in a culture shaped by philosophy more than by biological science. From the start, it conceptualized development as a lifelong process, with both universal and differential aspects.

During the early twentieth century, there was a dearth of theory in developmental psychology in the US. Some of the field's enduring topics emerged – the roles of nature and nurture in development, the dialectic of continuity and change – but the science was largely descriptive. In mid-century, grand theory came to dominate the field (Piagetian, psychoanalytic, and learning theories), and models of development as a stage-wise process were advanced (e.g., Kohlberg, Erikson, Loevinger). In subsequent decades, however, the influence of these grand theories waned, followed by a proliferation of perspectives and a focus on domain-specific development.

Looking back across the most recent period, David Elkind observed that developmental psychologists have shifted not only from studying just childhood to studying the whole lifespan, but also from the aim of simplification to the modeling of complexity. Development is viewed as a bio-psycho-social process embedded in history and culture and it is recognized that definitions of positive developmental outcomes are, in part, a function of place and time; developmental systems approaches and contextualism (e.g., Bronfenbrenner, Magnusson), Vygotskian socio-cultural perspectives, and life-course sociology have gained influence. At the same time, individuals are increasingly seen as active contributors to their own

development whose intentional processes, self-regulatory practices, and adaptive strategies warrant study.

Developmental psychologists employ a range of research methods, including observation, experiment, and cross-sectional comparison. Distinctively appropriate to developmental inquiry is longitudinal research (or better still, cohort-sequential research comparing the trajectories of multiple cohorts over time). Significant contributions to developmental knowledge have come from longitudinal studies launched in the first half of the twentieth century, which followed samples from early life onward; these included the Berkeley Guidance Study, Oakland Growth Study, and Terman Study of high IQ children. To analyze change over time, psychologists increasingly use statistical techniques such as structural equation modeling, survival analysis, and latent growth analysis.

## **The Study of Positive Development**

Notwithstanding active study of phenomena such as resilience and giftedness, and scattered research on children's well-being, much of the research on infancy and childhood continues to focus on deepening the understandings of normal development on the one hand (e.g., acquisition of language, theory of mind, emotion regulation), and pathogenesis or derailment of normal processes on the other (e.g., contributors to negative outcomes, effects of deprivation). However, recent decades have seen increased attention to optimal development after childhood. The lifespan perspective supports this orientation, attending to differential pathways, and emphasizing developmental plasticity and hence the possibility of positive transformation throughout life. Two noteworthy developments concern specific periods in the life course: emergence in the 1990s of a psychology of positive youth development (e.g., Benson, Lerner, Eccles, Larson); and a building interest in positive aging (e.g., Ryff, Baltes, Carstensen, Vaillant), accelerating in the late 1990s.

Positive youth development arose as a framework for intervention. Faced with growing social problems of teen substance abuse, crime, school dropout, and pregnancy, efforts were made in the 1970s and 1980s at first to treat, and subsequently to prevent, these problems. As the limitations of problem-focused approaches became clear, practitioners made a dramatic reorientation toward promoting teenagers' strengths and cultivating their resources for positive development. In this subfield, intervention preceded research and theory; the latter currently represent active fronts in developmental psychology.

For decades, much of gerontology shared the wider culture's focus on biological aging, and its image of later life as a period of deficit and decline sharply contrasting with the first two decades of life. However, psychologists have come to recognize that changes due to normal aging are distinct from changes due to illness, there is considerable variability in aging, lifestyle factors (e.g., exercise, diet) can positively affect biological aging, and different trajectories characterize different

domains and capacities. In an aging society, there has been growing attention to identifying means of aging well, and studying areas of age-associated gain such as self-regulation, socio-emotional functioning, and perhaps wisdom.

In addition to developments concerning particular periods of life, there have been efforts to conceptualize and study the processes by which positive development occurs throughout the whole lifespan. Examples include the maximization of gains and minimization of losses through selective optimization with compensation (e.g., Baltes), and the dialectic between differentiation and integration leading to increased complexity (e.g., Csikszentmihalyi).

## Future Directions

Developmental psychology has numerous growing edges, including developmental neuroscience and evolutionary developmental psychology; analysis of the roles of culture and context; and across domains, study of the actual mechanisms by which learning and development occur. Of particular interest to readers of this encyclopedia, advances in positive psychology stand to provide new impetus to developmental psychology's focus on optimal development and add to its understanding of flourishing throughout life. Looking ahead, topics of research perched at the intersection between developmental and positive psychology include the nature of well-being or positive experience at different ages; the lifespan development of positive phenomena such as character strengths; the developmental antecedents and sequelae of flourishing during each period of life; and the mechanisms or processes by which positive development occurs, including the dynamic relations between developing individuals and their proximal and distal, institutional and socio-cultural, environments.

SEE ALSO: ► College student development

► Developmental psychopathology ► Epigenetics ► Flourishing  
► Positive youth development

## Developmental Psychopathology

Patricia A. Lowe and Jennifer M. Raad

*University of Kansas*

Developmental psychopathology is an organizational framework to study children and adolescents' behavioral, emotional, and social problems arising from different etiologies, manifesting different symptoms at different ages across the lifespan, and resulting in different outcomes. It is a combination of developmental psychology (the study of how children and adolescents change over time and the factors responsible for those changes) as well as psychopathology (the study

of abnormal or maladaptive behavior). From a developmental psychopathology perspective, behavioral, emotional, and social problems experienced by children and adolescents result from multiple causes. The multiple causes may include biological factors (e.g., deficits in neurotransmitters), genetics (e.g., chromosome abnormalities), contextual variables (i.e., family, school, peer, and cultural variables), and the interactions between contextual variables and the child or adolescent. All of these factors may contribute to children and adolescents' behavioral, emotional, and social problems. Yet, some of these factors may be difficult to identify and in some cases, they may not be possible to treat.

Developmental psychopathologists are interested in children and adolescents' current functioning, and how their current functioning is the product of past events and is also related to their current and future development and exposure to risk and protective factors. Risk factors are those factors that increase the likelihood of a child or adolescent developing a mental health disorder. Examples of risk factors include premature birth, difficult temperament, insecure attachment, lack of parental supervision, peer rejection, and discontinuities between the home and school environment. In contrast, protective factors are those factors that moderate the impact of risk factors. Protective factors reduce the likelihood of a child or adolescent developing a mental health disorder. Examples of protective factors include easy temperament, secure attachment, parental warmth and well-being, academic competence, and positive peer relationships.

## **Assumptions of Developmental Psychopathology**

Several assumptions underlie a developmental psychopathology approach. The first assumption is that it is important to understand both normal and abnormal development in children and adolescents. By understanding both normal and abnormal development, individuals are able to judge whether children and adolescents' development is typical or atypical. A second assumption is that development leads to either adaptive or maladaptive behavior. However, behavior is context dependent and what is considered adaptive behavior in one context may not be viewed as adaptive behavior in another context. For example, research has shown that a difficult temperament is viewed as a risk factor among children in industrialized countries and a protective factor among children in primitive areas of third world countries. Children with difficult temperaments have negative moods and intense reactions. These individuals withdraw initially from novel stimuli and are slow to adapt to changes in their environment. They are at risk for behavioral, emotional, and social problems in industrialized nations. However, these same characteristics protect children in primitive societies and allow them to survive. A third assumption is that a change in development is influenced by multiple variables, including risk and protective factors, as well as individuals' assets and liabilities. A fourth and final assumption is that development results from the interactions of the various contexts of which children and adolescents are members.

## Theories/Models and Developmental Psychopathology

Developmental psychopathology addresses a broad range of phenomena, and there is no single theoretical orientation that is able to cover all the phenomena of developmental psychopathology. Thus, information is obtained from various theoretical orientations and is used to help distinguish adaptive from maladaptive behavior in children and adolescents and to design and implement developmentally appropriate intervention strategies to improve children and adolescents' well-being. Biomedical, psychodynamic, behavioral, cognitive, family systems theories and theories of attachment and parenting help professionals to understand the emergence of children and adolescents' behavioral, emotional, and social problems and to guide the course of the treatment focus from a developmental perspective. Human behavior involves neurophysiologic mechanisms in the biomedical approach, and emotional and behavioral disorders of children and adolescents are the result of physiological flaws and genetics. In the psychodynamic approach, emotional and behavioral problems of children and adolescents result from fixations at various stages of development due to unresolved conflicts or regressions to earlier stages of development. In contrast, behaviorists believe emotional and behavioral problems of children and adolescents are the result of inappropriate learned responses. Cognitive theorists highlight the importance of thoughts and behaviors and how faulty belief systems contribute to the emotional and behavioral disorders found in some children and adolescents. On the other hand, family systems theorists believe family dysfunction and more specifically, child and adolescent emotional and behavioral problems result from poorly or inconsistently defined boundaries or boundaries that are too rigid or too loosely defined between the parent, child, and sibling subsystems. Attachment theorists believe that early relationships between primary caregivers (e.g., mothers) and infants have a profound influence on individuals' lives. Children who develop strong bonds with their caregivers grow-up to be healthy, adjusted adults, whereas children who do not develop strong bonds with their caregivers, or whose caregivers are absent, experience more emotional and behavioral problems. Theories of parenting suggest that parents who are authoritarian (i.e., low on warmth and high on structure), permissive (i.e., high on warmth and low on structure), or neglecting (i.e., low on warmth and low on structure) have children and adolescents who experience more emotional, behavioral and social problems than children and youth who have parents who are authoritative (i.e., high on warmth and high on structure). Together, the various theoretical orientations mentioned provide professionals with information and guidance concerning expectations for behavioral, emotional, and social outcomes for children and adolescents.

Besides these theoretical orientations, developmental models of psychopathology have emerged to help explain adaptive and maladaptive behavior. The three developmental models of psychopathology include the trait model, environmental model, and interactional model. In the trait model, traits (e.g., aggression, trait anxiety) are viewed as stable personality characteristics, and these stable personality characteristics are less likely to change over time. Thus, according to



the trait model, individuals who are aggressive as children are more likely to demonstrate aggressive behavior as adults. In the environmental model, the environment is believed to have a powerful influence on children and adolescents' behavior. Children and adolescents who live in positive environments will be well-adjusted and those children and youth who live in negative environments will exhibit more maladaptive behavior. If the environment changes from positive to negative, then children and adolescents' behavior will change from adaptive to maladaptive. On the other hand, if the environment changes from negative to positive, then children and adolescents' behavior will change from maladaptive to adaptive. In the interactional model, children and adolescents' traits or characteristics and their environments play a role in determining their course of development. Children and adolescents' development is the result of interactive processes in which they adapt to their changing environments and by adapting to their changing environments, they influence their surroundings.

## Assessment and Diagnosis and Developmental Psychopathology

When children and adolescents experience behavioral, emotional, or social problems, an assessment is conducted to diagnose signs and symptoms suggestive of a mental health disorder. The purpose of the assessment is to diagnose the problem so that the most appropriate intervention strategies based on a developmental perspective can be selected to treat the problem. A comprehensive assessment involves an in-depth evaluation of multiple areas of a child or adolescent's functioning such as cognitive, academic, social, emotional, and behavioral functioning, and these areas are assessed using multiple techniques such as interviews, behavior observations, norm-referenced and informal measures completed by multiple informants which may include parents, teachers, peers, and the child or adolescent. A comprehensive evaluation allows clinicians to assess the unique aspects of psychopathology of the individual child or adolescent, as well as the different contexts that influence the individual's behavior.

One of the major goals in the assessment of children and adolescents is to determine whether their behavior fits into the realm of adaptive or maladaptive behavior. How their behavior is classified is dependent to a certain extent upon the classification system used. There are two major systems used for classifying child and adolescent disorders or problematic behaviors: One is the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) classification system, and the empirically-based or dimensional classification system. The DSM classification system is a categorical system used to define disorders based on a medical model. The DSM approach views disorders as present or absent based on the number and type of symptoms manifested. For example, to meet the diagnostic criteria for an attention deficit/hyperactivity disorder (ADHD), predominately inattentive type, a child or adolescent must have at least six inattentive symptoms and less than six hyperactive-impulsive symptoms across two or more settings, and some of the

symptoms must have been present before the age of seven. A child exhibiting six or more inattentive symptoms may qualify for the diagnosis, while a child exhibiting fewer than six inattentive symptoms will not qualify for an ADHD, predominately inattentive type diagnosis. The second classification system, the empirically-based paradigm, views behavior along a continuum, with adaptive behavior at one end of the continuum and maladaptive behavior at the other end of the continuum, rather than discrete all-or-nothing categories.

## **Intervention and Prevention and Developmental Psychopathology**

Given the complexity of behavioral, emotional, and social problems in children and adolescents, multicomponent treatment approaches have been used with greater frequency. A multicomponent treatment approach involves the use of two or more intervention strategies to treat presenting problems found in children and adolescents. Empirically-based interventions have also received growing support to address children and adolescents' behavioral, emotional, and social problems. Empirically-based interventions are well-established treatments that have been shown to be effective in reducing children and adolescents' problematic behaviors. Clinicians use a standard protocol or manualized approach to deliver interventions to individuals. Although additional research is needed with empirically-based interventions, these strategies when used with children and adolescents need to be sensitive to developmental issues.

## **Future Directions**

Estimates of mental health disorders among children and adolescents have ranged from 15% to 30% in the US. With such astonishingly high statistics, arguments for a preventive approach to mental health disorders have been supported. Research has shown that early intervention increases the likelihood of success in treating children's behavioral, emotional, and social problems. More prevention research and prevention programs are needed to address children and adolescents' mental health needs. Future prevention efforts will focus on a number of areas including human strengths. Human strengths such as courage, perseverance, and optimism serve as buffers and help prevent mental health disorders in children and adolescents. Martin Seligman, a prominent researcher in the positive psychology movement, suggests that it will be important to conduct studies in the future to develop a better understanding of these human strengths and to foster their development in children and youth.

SEE ALSO: ► Attachment theory ► *Diagnostic and Statistical Manual*  
► Effective parenting ► Psychopathology ► School psychology

## ***Diagnostic and Statistical Manual***

Kirsten J. Wells

*University of Kansas*

The *Diagnostic and Statistical Manual* (DSM) is a handbook of mental disorders published by American Psychiatric Association. The DSM is a comprehensive classification system that provides a summary overview of numerous mental disorders along with prevalent information on diagnostic criteria and related features. The DSM also provides a system of coding for medical record keeping based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) and a multiaxial system of patient evaluation for organizing and communicating clinical information.

The DSM is intended to be used by mental health professionals who have had clinical training and is to be used in tandem with a practitioner's clinical judgment, not as an independent diagnostic tool. The DSM is organized into sixteen diagnostic classes containing 297 different clinical diagnoses. Each disorder profile includes information on diagnostic criteria, associated features and mental disorders, relevant laboratory findings, prevalent medical features, specifics on culture, age, and gender features, prevalence, course, familial patterns, and differential diagnoses.

The DSM uses a five-axis system for patient evaluation. Clinical disorders and other conditions that may be a focus of clinical attention are to be recorded on axis I. For example, schizophrenia paranoid type would be recorded as follows using its diagnostic code number: 295.30 Schizophrenia Paranoid Type. Axis II is for personality disorders and mental retardation. Information regarding an individual's general medical condition is entered on the third axis. On axis IV, psychosocial and environmental problems the patient is experiencing are reported. The last axis is used to report an overall score of functioning known as the Global Assessment of Functioning Scale (GAF) rating. The scale measures from 0 to 100 with the lower end of the scale representing the lowest levels of functioning such as recurring violence or suicidal actions. The top range of the scale represents a high level of functioning.

The DSM system not only provides a concise method of summarizing and recording a patient's presenting concerns, but also provides a language to communicate with other mental health personal and agencies. Many insurance companies now require an axis I diagnosis in order for mental health services to be covered. This mandate has raised concerns that inaccurate and excessive diagnosis of mental disorders is occurring for the sake of financial reimbursement.

The DSM grew out of early classification systems whose initial aim was to gather uniform statistics across mental hospitals in the early nineteen hundreds hence the use of statistical in the title. The DSM has been influenced by work done by the U.S. Army Veteran's Administration efforts to improve their service of World War II veterans and the ICD.

The DSM has been revised five times since 1952. The most current version is the DSM-IV-TR released in 2000 with the sixth revision, the DSM-V, expected to be published in 2011. Each revision is a complicated endeavor that is undertaken by numerous task forces and work groups assigned to different topics who work to garner the most up-to-date information on their subject.

Despite its wide use by mental health professionals in clinical, research, and educational settings, the DSM has been fraught with controversy since it was first published in 1952. Opponents of the DSM cite numerous arguments against its usefulness and validity that range from the arbitrary creation of mental disorders, questions regarding the inclusion and exclusion of certain disorders, labeling individuals with diagnoses that have negative connotations, and focusing only on a deficit view which fails to look at an individual's strengths and sources of positive support.

Proponents of the DSM on the other hand state that the DSM provides a valuable tool for understanding and that diagnosis can provide a more effective means to help a client. They also claim that diagnosis is an inherent aspect of psychology and the DSM provides standards for this practice.

As psychology's focus has shifted from a mainly pathological approach focusing on weaknesses and deficits to one that includes a focus on the positive and individual strengths the challenge has been issued to amend the DSM to be more inclusive of this new focus. In response to the need for focus on strengths and positive aspects, Seligman and Peterson published *Character, Strengths, and Virtues*. This handbook of strengths and virtues is often referred to as the "anti-DSM" because it works to classify what is right about people rather than what is wrong.

One of the issues that lies at the heart of the DSM is the way in which the mental disorders are created, or as Thomas Szasz has suggested, invented. The mental disorders in the DSM are created by a group of individuals who categorize groups of symptoms or patterns of behavior that are believed to deviate from the norm and are considered as disruptive or undesirable. It is the social construction of disorders that are eventually classified as diseases of the mind rooted in physiological defects and promoted as fact that scientists such as Szasz and James Maddux object to. The declassification of the disorder of homosexuality in 1974 is a classic example of how these mental disorders are linked to social values.

While disorders such as homosexuality have been dropped from the DSM, numerous others have been added as the manual has greatly expanded from the original 106 disorders. This has stimulated a debate about what is included in and excluded from the DSM. Many individuals believe that the DSM has turned ordinary life problems, such as caffeine consumption and jet-lag, into mental disorders.

Another issue that mental health professionals struggle with is the negative connotations that are imbedded within many of the mental disorders and terminology used by the DSM. While the DSM states that it does not categorize individuals but only disorders, the fact remains that once an individual has been labeled with a mental disorder, judgments and inferences will be drawn about them by many people. This is of even greater concern given the need for diagnosis for insurance

purposes and computerization as many practitioners fear that their clients will have to continue to live with their label regardless of their current state or the appropriateness of the diagnosis initially. These labels force people into negative categories that create a division between the normal and abnormal.

The DSM's focus on deficits and weaknesses has prompted many in the positive psychology community to search for alternatives or changes that will encourage the identification of an individual's strengths and positive resources. While the creation of *Character, Strengths, and Virtues* addressed this concern with its shift to focusing on psychological health, others such as Lopez and colleagues have also proposed adjustments to the DSM five-axis structure. They suggest broadening axis IV to include everyday resources that could serve as protective factors. A reorganization of axis V is suggested to assess both functional deficits and areas of optimal well-being. A final suggestion for the inclusion of a sixth axis that would include a person's strengths and facilitators of growth would provide a valuable resource in developing a treatment plan.

SEE ALSO: ► Mental Illness ► Strengths (VIA)

## Diener, Ed

Robert Biswas-Diener

*Center for Applied Positive Psychology*

Ed Diener (1946–) is a social/personality psychologist best known for his work on subjective well-being (SWB) and the measurement of emotion. He was born in Glendale, California and was raised, with his five siblings, on a farm near Fresno. While taking a class in psychology at California State University-Fresno, Diener was dissuaded from writing a paper on happiness because it was not thought at the time to be a topic of academic merit. He abandoned his interest in happiness and went on to study de-individuation at the University of Washington, where he received his PhD in social and personality psychology.

Diener is currently Alumni Distinguished Professor at the University of Illinois-Urbana, where he has worked since 1974. After receiving tenure, Diener turned his research attention to his longtime area of personal interest, happiness. He has published more than 200 papers – 87% of which were coauthored – and has a citation count of more than 11,000. Diener was also the editor of the *Journal of Social and Personality Psychology: Personality Processes and Individual Differences* from 1998–2003, a period during which he championed scientific rigor and multi-method studies. He is also the cofounder of the *Journal of Happiness Studies*, and the founding editor of *Perspectives on Psychological Science*.

Diener was among the pioneers of positive psychology research. His early career was spent examining demographic correlates of happiness and establishing the fact that it is possible to effectively measure happiness through self-reports and

experience sampling. His later research focused on cultural issues in SWB, the benefits of happiness, and the structure of affect. Among Diener's most important contributions to the measurement of happiness are the development of the *Satisfaction with Life Scale*, the discovery that self-reports correlate well with biological and other measures of happiness, and findings related to the distinction between the frequency and intensity of emotional experience. Diener's contributions to the general understanding of happiness include the findings that most people report being mildly happy, that momentary feelings of happiness differ from recalled happiness, that norms for happiness differ across cultures, that the relationship between income and happiness is intricate, and that happiness is beneficial to health, creativity, and social relationships. Diener has also been instrumental in spearheading a movement to convince policy-makers to adopt the measurement of happiness alongside traditional economic measures.

Diener's research on SWB has had an impact on positive psychology in several ways. He was able to establish the study of positive topics as both possible and worthwhile. Diener also has been influential through his membership on the Positive Psychology Steering Committee, as the organizer of many positive psychology conferences, and as the advisor of many graduate students who have gone on to pursue academic careers studying positive subjects.

SEE ALSO: ► Emotions ► Experience sampling method ► Happiness  
► Life satisfaction

## Dopamine

Candice A. Ackerman

*University of Kansas*

Dopamine is a chemical that acts as both a neurotransmitter and hormone in the brain of humans and many other organisms, assisting in many activities including movement, motivation and reward, mood, attention, and learning. Dopamine works to activate five specific dopamine receptors of the brain. As a hormone, dopamine works to regulate the amount of prolactin released from the anterior lobe of the pituitary gland. In its chemical structure, dopamine is a phenethylamine, and is a member of the catecholamine family.

## Pleasure and Joy

Dopamine is highly associated with the pleasure-seeking system of the brain, and is released by naturally rewarding experiences like sex, food, some drugs (namely cocaine, nicotine, and amphetamines), and any neutral stimuli that can be associated with them. Studies in lab rats have come to show the use of drugs or other substances can increase the amount of dopamine in the brain, which thereby increases

the experience of pleasure. From these assumptions, dopamine is considered a major factor for those individuals suffering from addictions. At extremely high amounts, dopamine can produce hypomania or mania.

Dopamine is also considered one of the primary neurotransmitters in contribution to feelings of joy. Activities that produce these feelings can range from completing a puzzle or eating your favorite food, to having sex or taking drugs.

## Motivation and Reward

Dopamine is also relevant in the process of learning and conditioning. During the process of learning, dopamine will increase in the brain when an unexpected reward is paired with a conditioned stimulus. Coincidentally, dopamine will decrease when the conditioned stimulus is presented without a reward (e.g., extinction). Additionally, dopamine in the mesolimbic pathway increases goal directed behaviors and creative drive while decreasing latent inhibition. From these principles, applicable medical conditions have been studied which can be affected during the process of conditioning.

Attention deficit hyperactive disorder (ADHD) is one to have been examined with effects of dopamine. As mentioned previously, dopamine can also have an effect on attention, in addition to motivation and learning. In individuals with ADHD, their attention and reward systems are energized by the pursuit of pleasure that brings immediate gratification. But what happens when these needs are not met? Scholars call this *reward deficiency syndrome*, which claims that a person who has a lack of internal rewards will lead him or her to self-medicate with substances and/or behaviors that are rewarding. This can be a result of a lack of dopamine in the reward systems of the brain, along with serotonin and endorphins. With this information in mind, studies have also found that children and adolescents with conditions like conduct disorder or ADD are 5.5 times more likely to be addicted to drugs or alcohol.

## Attention and Flow

Dopamine is unique in that it is released when individuals find themselves in new and challenging situations, and persistent attention is needed. Those who engage in activities which produce flow could also find themselves high in dopamine. Flow, according to Csikszentmihalyi, occurs when an individual feels challenged and is using a high-level of skill.

## The Dopamine Hypothesis

The dopamine hypothesis, originally proposed by Solomon Snyder in the 1970s, suggests that high levels of dopamine due to hyperactive signal transduction in

the brain causes the symptoms associated with schizophrenia. Support for this hypothesis mainly derives from research with dopaminergic drugs, like phenothiazines and amphetamines, which block dopamine reception and thereby reduce the severity of schizophrenic symptoms. It is important to note the dopamine hypothesis does not claim that high levels of dopamine contribute completely to psychoses like schizophrenia, but rather it proposes that people with schizophrenia have too many postsynaptic dopamine receptors or that their receptors could be extremely sensitive to dopamine. However, problems with the dopamine hypothesis occur since this does not seem to apply to the one-fourth of patients with schizophrenia who have little response to antipsychotic medications.

## **Dopamine and Other Mental Conditions**

Dopamine has also been shown to be a contributor to individuals with Parkinson's disease, due to a deficit in the neurotransmitter. Further findings show that a lack of dopamine biosynthesis (when chemical compounds are reduced to simpler reagents) can cause Parkinson's disease. Treatable with prescriptions like L-Dopa, this medication can cross the blood brain barrier to get into the central nervous system, which dopamine alone cannot. In some cases, individuals receiving this treatment can also experience minor psychotic side effects similar to schizophrenia symptoms.

## **Future Research**

Future research in dopamine continues as technology advances and more is learned about the brain. Dopamine has recently been studied in relation to depression, ADHD, genetic dispositions for conditions like Parkinson's disease, and neuroimaging in conditions like Tourette syndrome. As discussed, drug therapy treatments can have profound effects on those suffering with abnormal amounts of dopamine in the brain, and treatment continues to spur research in hopes of better understanding brain chemistry and the brain itself. With further understanding of the many roles of dopamine, we can better treat those with behavioral, psychological, or medical conditions in a more holistic manner.

SEE ALSO: ► Abnormal psychology ► Enjoyment ► Flow  
► Neurobiology ► Pleasure



# E

## Effective Parenting

Kristin N. Rasmussen

*University of Kansas*

Before I got married I had six theories about bringing up children; now I have six children, and no theories. (John Wilmot, 2nd Earl of Rochester, 1647–80)

When it comes to parenting, no one begins with all the right answers. A successful parenting experience requires considerable amounts of learning, patience, problem-solving, and courage, among a myriad of other human strengths. Parenting can bring about in parents emotions that cover the spectrum, from frustration and anger to overwhelming joy and fulfillment, as parents take on the responsibility of raising another human being. Although participants in the nature-nurture debate disagree about the ways in which and the degree to which parents influence the outcomes of their children's lives, most people agree that throughout this journey of parenthood, how individuals parent matters. Beyond having the responsibility of keeping their children safe, parents have opportunities through effective parenting to foster positive, healthy development in their children.

## Effective Parenting Styles

In examining the practices parents use in raising their children, Diana Baumrind, a research psychologist at the University of California, Berkeley, has described three different parenting styles: authoritarian, authoritative, and permissive. These styles

refer to parents' positions on the dimensions of demandingness (level of strictness, expectation holding, and supervision) and responsiveness (level of warmth and acceptance). Parents who are authoritarian demand a lot from their children yet offer little accepting support. Conversely, permissive parents tend to be highly accepting yet do not provide sufficient supervision or discipline. The authoritative style refers to parents who are both warm and firm in their parenting techniques. Drawing on Baumrind's work, family theorists sometimes describe a fourth parenting style, the neglectful style, which depicts parents who are low in expectations and supervision yet also low in acceptance.

Empirical parenting literature commonly asserts that adopting a warm, responsive parenting style such as the authoritative style leads to the most positive lasting effects on parent-child relationships and on children's intellectual, social and emotional development. In school, children of authoritative parents tend to perform better academically and to display more prosocial behavior toward peers and teachers than do children of parents who adopt authoritarian, permissive, or neglectful styles. At home, an authoritative parenting style often coincides with enhanced parent-child communication. Additionally, children of authoritative parents often develop healthier self-esteem and more optimistic outlooks on life.

John Gottman, professor emeritus at the University of Washington, has described parenting styles as they concern parents' responses to their children's emotions. He categorizes patterns of parental reactions to emotions as being dismissing, disapproving, laissez-faire, or emotion-coaching. Dismissing parents ignore or make light of children's emotions, while disapproving parents criticize or harshly judge their children's emotions. Laissez-faire parents, however, much like Baumrind's permissive parents, demonstrate their acceptance and approval of emotions yet fail to offer guidance or direction. The last style, emotion-coaching, describes parents who encourage their children to share emotions, who demonstrate empathy and acceptance of the emotions, and who still offer guidance and direction.

Among these parenting styles, emotion-coaching is the most effective in promoting healthier development for children and adolescents. Gottman illustrates five ways parents can embrace an emotion-coaching parenting style. The first component simply involves parents becoming aware of emotions. Children's body language, tone of voice, and facial expressions can give clues about how children feel, and noticing these things is one way to begin identifying children's techniques for expressing their different emotions. The second step of emotion-coaching asks parents to reframe their thoughts of children's emotional reactions so that parents think of the emotions not as bothers or burdens that need quick fixes but as opportunities for teaching and connecting with children. Third, empathic listening and validation are essential in emotion-coaching. This step involves parents demonstrating to children their understanding of, and their genuine interest in, the children's feelings. One simple technique to assist parents with this task is to

ask children directly, “How are you feeling?” Sometimes children may not be able to name their emotions, and in this case, step four suggests parents take care to recognize the emotions themselves and help children find words for them. Lastly, emotion-coaching parents can benefit from offering guidance while they engage in mutual problem solving with their children. This step may be especially important when parents react to misbehaviors that accompany negative emotions. In such instances, parents should avoid reprimanding children’s feelings and instead focus on explaining behaviors that are more desirable.

According to Gottman, when parents follow these steps of emotion-coaching, their children have a greater chance of leading happier, less stressful lives. Specifically, their children are more likely to achieve academically, have fewer behavioral problems, relate better to others, and have improved physical health. Likewise, Gottman’s research shows that in comparison to children of parents using other parenting styles, children of emotion-coaching parents have higher rates of resiliency after negative moods or emotional crises, including marital conflict.

## **Stages of Effective Parenting**

A consistently warm, responsive style is a longitudinal requisite of effective parenting, but beyond that, parents are called upon to engage in particular practices at different stages in their children’s lives in order to promote healthy social, emotional, intellectual, and physical development. As their children move through infancy, toddlerhood, childhood, adolescence, and even adulthood, effective parents need to be flexible enough to employ suitable techniques and attitudes that are commensurate with their children’s current developmental levels.

### **Infancy (Birth to Age 1)**

Infants depend more on parents than do children in any other stage of development. Consequently, this stage can be the most exacting for parents, requiring intense responsibility on their part as they maintain the well-being of their children. In contrast to children in later developmental stages and contrary to the old adage, infants cannot be spoiled. Rather, they require parents who are consistently sensitive to their needs and who provide a predictable environment. In this manner, they can begin to develop trust, a milestone which developmental psychologist Erik Erikson proposed as the primary role for children in the beginning stage of development. During this time also, the opportunity presents itself for children to form a bond with their parents. Developmental psychologist John Bowlby referred to this process as attachment. According to Bowlby, children who form a secure attachment to their parents at this developmental stage experience, in most areas of development, notable longitudinal advantages over children who never form secure attachments.

### Toddlerhood (Ages 1–3) and Early Childhood (Ages 3–6)

As children enter into toddlerhood and early childhood, their developmental aim moves beyond forming attachments and being totally dependent on parents to a stage consisting of an increasing desire for exploring the stimulating and curiosity-provoking world around them. This time still can be strenuous for parents, whose children at this point need them consistently to remain readily available, involved, and responsive. To balance this high level of involvement, parents can remember their children are no longer completely reliant on them to provide knowledge and experiences. They can respect the fact that their children are learning to do some things on their own, and they can encourage this new quest for self-guided discovery.

Likewise, because of their children's increasing curiosity in others, parents who model positive behavior from this point forward can be especially helpful in enhancing their children's learning processes. Albert Bandura, professor of social science in psychology at Stanford University, conducted a classic experiment demonstrating this occurrence of children's social learning through imitation. In his experiment, children in experimental groups watched an adult who either did or did not display aggressive behavior after playing briefly with toys. Results showed that the children who had viewed an adult model aggressive behavior – as opposed to children who watched adults play using nonaggressive behavior or children who were in the control group with no model – were more likely to show aggressive behavior themselves when faced with a frustrating situation. This inclination was especially evident in cases where the adult model and the child were the same sex and was more evident for male-male pairs than female-female pairs.

As Bandura's experiment demonstrates, adults' actions and behaviors can affect children's learning and subsequent actions. Parents' words make a difference as well; the verbal expressions they choose when teaching their children can influence how their children react and learn. For example, parents can be more effective by directly verbalizing their expectations and by phrasing them in a way that allows their children to know what actions are appropriate and not just what not to do. For example, parents can instruct their children, "Please ask for your toy using your normal voice," rather than telling them, "Don't scream." Additionally, parents can increase the frequency of positive behavior by acknowledging it and explicitly praising their children for it when it occurs. To discipline after unwellcome behavior, experts recommend time out or a withholding of privileges.

### Later Childhood (Ages 6–11) and Adolescence (Ages 11–18)

Many of the parenting strategies that are effective during early childhood stages still apply as children move through later childhood. Modeling desired behavior remains important as does clear communication of expectations. However, also during this time, children are aiming for more independence and often find themselves in an unsteady balance between still needing their parents, yet feeling

in some ways like an adult. They are looking to find and assert their own identity. To respect their children's search for identity and growing independence, parents can move beyond simply telling their children what behavior is good or bad, and they can begin to guide and discipline by encouraging their children to recognize the natural consequences that follow their actions. Also, though their children may be asserting themselves as capable independent beings, because the children at this point have not reached full maturity, parents may need to keep in mind that they, not their children, take on the bulk of the responsibility in changing any maladaptive interactions they continue to have with their children.

## **The Role of Strengths in Effective Parenting**

In addition to following the recommendations of experts, effective parents can utilize their own unique strengths to enhance their parenting. Recent strengths literature has begun looking at this relationship between individual strengths and parental and family functioning. For instance, Holly Brophy-Herb and Alice Sterling Honig, in 1999, reported that in a study they conducted, mothers' tendencies to reflect actively on their own past were significantly associated with a responsive and sensitive style as well as parenting practices that promote positive development. Furthermore, Todd Kashdan and his colleagues completed a study in 2002 of families with children with externalizing disorders. They stated that for their participants, the agency component of hope, as operationalized in C. R. Snyder's hope theory, was significantly positively associated with improved parent and family functioning above the effects of social desirability, the severity of their children's disorders, and optimistic attributions.

## **Contextual Factors Affecting Parenting**

Though the recommendations of experts and authors of empirical parenting literature provide insight, consumers of this information also should consider contextual factors that may have an influence on parenting and on child outcomes. Factors such as cultural norms, family income level, parent education level, and parent or child mental illness have been addressed in literature as possible mediators in the relationship between parenting approaches and child outcomes. Therefore, these variables need consideration when clinicians and parents are contemplating which directions to take in pursuit of effective parenting.

## **Methodological Issues**

In 1986, Grisso stressed that assessment of effective parenting should address a parent's understanding of the parenting role, beliefs about what successful

parents do, and potential for carrying out necessary parenting skills. However, even when parenting measures cover these topics, assessors need to be aware of some of the common factors that influence measurement outcome. One of these factors is social desirability, which may tend to appear more frequently in cases where the parent has more at stake (e.g., a forensic evaluation for custody). Additionally, Budd and Holdsworth pointed out in 1996 that the setting in which the assessment takes place can affect outcomes. Home evaluations can provide different information from clinic observations of parenting. To alleviate this problem, Budd and Holdsworth recommend employing multiple assessment styles in varied settings. They also mention, though, that even this technique cannot predict future behavior; instead it provides a current view of parenting and identifies possible risk factors and coping strategies for the future.

## Summary

Among several observed parenting styles, consistently a warm, responsive style is hailed as the most effective in promoting healthy development for children. Beyond employing this effective style, parents also must recognize that different developmental stages call for various strategies, in accordance with a child's milestones at those stages, in order for parents to be effective in providing conditions that allow their children to flourish. Furthermore, throughout each stage of their children's development, parents can increase their chances of being effective by taking advantage of their own unique strengths or by looking to gain assistance from outside sources such as family and friend social support or reliable parent training programs. Though parenting may be the biggest challenge some individuals endure, parenting literature abounds, implying that the encouragement of successful parenting is a worthy and accessible aspiration.

SEE ALSO: ► Attachment theory ► Family functioning

## Emotional Approach Coping

Sarah J. Sullivan and Annette L. Stanton

*University of California, Los Angeles*

When individuals encounter situations that strain or exceed their psychosocial resources, they typically engage in efforts to change aspects of the situation itself (i.e., *problem-focused coping*) and to manage their emotions regarding the situation (i.e., *emotion-focused coping*). *Emotional approach coping* is one specific form of emotion-focused coping and is characterized by attempts to actively process and express stressor-engendered emotions. More generally, emotion-focused coping entails a variety of strategies, including avoiding thoughts and feelings about

the stressor, attempting to accept the situation as it stands, recruiting social support, seeking spiritual comfort, and more. In contrast, problem-focused coping involves strategies such as gathering information and engaging in problem-solving. Advanced by Richard Lazarus and others, the distinction between problem-focused and emotion-focused coping is long-standing in theory and research on coping, but coping researchers and theorists have pointed out problems with this demarcation and particularly with the concept of emotion-focused coping.

The ways that emotion-focused coping have been conceptualized and measured are problematic in at least two respects. First, individuals employ a host of approaches to manage emotions in stressful circumstances, and these varying methods have been aggregated into unitary self-report measures in some cases. Some emotion-focused strategies are uncorrelated or inversely correlated, however, which indicates that combining them is ill-advised. An example is coping through avoidance versus through expression of emotion. Both are emotion-focused strategies, but involve very different behaviors and likely are associated with distinct adaptive outcomes.

A second problem is that items on some self-report instruments created to assess emotion-focused coping (e.g., "I become very tense") appear to reflect distress or self-deprecation. Thus, the common finding in research on stress and coping that emotion-focused coping is associated with poor psychological adjustment might result from overlap in content (i.e., confounding) between coping measures and adjustment outcomes rather than a valid assessment of the hazards of emotion-focused coping. Until recently, most emotion-focused coping measures have included such confounded items. An exception is work by Annette Stanton and colleagues to develop new assessments. Termed "coping through emotional approach," the construct and its measurement reflect active and intentional emotional processing (EP; i.e., attempts to acknowledge, explore, and understand emotions) and emotional expression (EE; i.e., verbal and/or nonverbal efforts to communicate or symbolize emotional experience). The Emotional Approach Coping (EAC) scales can be administered in a situational version, which is completed with reference to a specific stressful experience, or a dispositional version, which assesses how the individual generally responds to stressful situations. The scales demonstrate high internal consistency and test-reliability. Although the EE and EP scales are moderately to highly intercorrelated, they demonstrate distinct relationships with constructs such as family expressivity and differentially predict adaptive outcomes.

Researchers have examined individual characteristics associated with greater use of EAC under stress. Lay wisdom might predict that women would be more likely to employ EAC strategies, but research has demonstrated somewhat inconsistent gender differences in their use. When differences do emerge, women are more likely to endorse EE and EP strategies than men. With regard to personality attributes that predict EAC, some studies suggest that EP is associated with a more adaptive set of personality traits, including self-esteem, hope, and low neuroticism, in young women but not in young men, but other studies reveal few gender

differences. EAC is moderately related to self-report measures of mood regulation skills and also correlated (albeit at a lower level) with a performance-based measure of emotional intelligence. Furthermore, EAC is negatively correlated with a self-report measure of alexithymia, a construct that reflects difficulty labeling and expressing emotions. EAC has been shown to predict adjustment during stressful encounters even when the effects of social support are controlled statistically. Thus, research supports the convergent and discriminant validity of the EAC scales.

Although findings are not entirely consistent, a growing body of research points to the salutary effects of EAC strategies for certain individuals facing specific stressful circumstances. Cross-sectional studies have demonstrated inverse relations of EAC strategies with affective pain and depressive symptoms in men and women with chronic myofascial pain, as well as with trait anxiety and depression in African American adults. Longitudinal designs offer a more powerful test of the psychological benefits of EAC. Studies have explored the relationships between EAC and psychological and physical health-relevant outcomes in samples of individuals coping with diverse stressful life events, including infertility, sexual assault, and breast cancer. For example, greater use of EAC strategies predicts superior psychological adjustment over time in both men and women coping with infertility, and husbands' greater EAC protected wives low in EAC from an increase in depressive symptoms after a disappointing attempt at pregnancy. In the domain of recovery from sexual assault, coping through EE is positively associated with increased feelings of control over the recovery process; feelings of control are in turn related to decreases in distress. Further, an increase in approach-oriented coping (a higher-order construct that subsumes EE) is positively related to increasing perceived positive life changes following sexual assault.

Several researchers have examined EAC in the context of coping with cancer. In women with early-stage breast cancer, coping through EE appears to confer psychological benefit in the form of increases in vigor, quality of life (for women with emotionally receptive social environments), and posttraumatic growth, and a decrease in distress. EE also predicted fewer medical appointments for cancer-related morbidities and an improvement in perceived physical health over a three-month period in one study, as well as longer survival in an 8-year study of African American and European American women with breast cancer. The relationship between EP and positive psychological adjustment in women with breast cancer is more complicated, in that in some studies EP is associated with superior adjustment but also has been associated with greater distress when EE is statistically controlled. It is possible that EP may be helpful to the extent that individuals express the emotions that are processed and that EP late in the stressor trajectory reflects rumination. In contrast, early processing might equip individuals to derive maximal benefit from EE over the course of the stressor.

Researchers have begun to examine for whom and under what circumstances EAC is most likely to promote positive functioning. Social environments, the nature of the stressor and the individual's appraisal of it, gender, and individual differences (such as emotion regulation skills) are all likely to influence the utility of



EAC strategies. Both longitudinal and experimental research suggests that more emotionally receptive social environments provide more fertile ground for EAC. EAC also is likely to be more useful when one encounters uncontrollable stressors, which are relatively unresponsive to problem-focused coping efforts. Individuals who possess positive psychological resources (e.g., high hope) appear more likely to benefit from EAC. Cultural contexts that facilitate the utility of EAC remain unexplored.

Mechanisms for the effects of EAC have received some consideration. First, salutary effects of EAC may result from opportunities for goal clarification and pursuit that EP and EE offer individuals. If processing and expression aid individuals in identifying both their goals as well as obstacles to reaching those goals, then these strategies may assist individuals in generating pathways to achieving meaningful goals that contribute to psychological well-being. Second, EAC may help individuals adapt to challenging circumstances through repeated exposure to stressor-related emotions and subsequent habituation to and modification of feelings and cognitions surrounding the stressor. Finally, EP and EE may encourage individuals to find social environments that are amenable to their needs and then to call upon resources within those social environments in ways that are most useful to them. Although the exploration of mediating pathways between EAC and positive psychological adjustment is in its early stages, viable mediators exist.

Findings from emotion science, and particularly those pertinent to emotion regulation, increasingly are being integrated into psychotherapeutic approaches. Interventions that involve EP and EE as central components, such as Greenberg's emotion-focused therapy, have demonstrated efficacy. Specifically, greater depth of EP predicts decreases in depressive symptoms and increases in self-esteem in emotion-focused treatments of depression. At present, limited evidence exists for the direct roles of increases in EE and EP in mediating positive change during psychological interventions. Two intervention trials (a creative arts therapy and a psychoeducational group intervention) for cancer patients did not evidence changes in EAC as a result of intervention. However, two other trials of cognitive-behavioral stress management (CBSM) for breast cancer patients demonstrated an increase in EAC in CBSM participants relative to controls, and EAC mediated the positive effects of CBSM in one of the trials. EAC also might moderate the effects of psychological interventions. Suggestive evidence comes from experimental trials of written expressive disclosure, in which individuals who report high use of EAC are more likely to benefit from expressive disclosure than those low in EAC.

Many questions remain regarding the utility of coping through processing and expressing emotions during stressful encounters. Future research should further delineate for whom and under what circumstances EAC strategies are helpful. Individual difference factors, the sociocultural context, and stressor characteristics are all likely to condition the effects of EAC on adjustment during stressful experiences. Fine-grained analyses of the consequences of EAC with regard to specific emotions are warranted. The role of EAC in influencing behavioral and biological outcomes also requires examination. Experimental research on

interventions is needed to illuminate how to harness best the salutary effects of EAC in the service of promoting well-being and health.

SEE ALSO: ► Cognitive appraisal ► Coping ► Proactive coping  
► Stanton, Annette

## Emotional Asymmetry

Michael A. Cohn

*University of Michigan, Ann Arbor*

Emotional asymmetry refers to a series of empirical findings describing differences between the general class of positive emotions and the general class of negative emotions. These differences are:

- Negative emotions command more attention and have more weight in determining one's overall evaluation of an experience (*negativity bias*).
- Positive emotions are generally milder than negative emotions, but occur more often. Most people rate themselves as happy most of the time (*positivity offset*).
- Negative emotions function to narrow our attention in on a specific problem and help us find an immediate solution; positive emotions function to help us notice new opportunities and engage in novel thoughts and behaviors (the *broaden effect of positive emotions*).
- Negative emotions are primarily concerned with immediate threats or needs; positive emotions make us more likely to invest in future resources or in other people (the *build effect of positive emotions*).

## Negativity Bias and Positivity Offset

In most domains and situations, negative information trumps positive information. People attend more to threats than to opportunities, and negative information about a person affects one's evaluation of them more strongly than positive information. This may be what evolutionary psychologists characterize as a "smoke alarm" type of system. Home smoke alarms sometimes go off because of candles or burned food, but these false alarms are acceptable if they mean that the detector is sensitive enough that it will never fail to detect a real fire. Similarly, we often overreact to negative information or distrust people who are actually trustworthy. These false alarms occur because the negative emotion system evolved to minimize the chances that we would ignore a real threat or trust someone who is going to betray us – errors with high and potentially fatal costs. As a result of this negativity bias, we often miss out on opportunities to be happy or take

advantage of positive opportunities. However, missing a positive experience is rarely an immediate threat to survival.

Surprisingly, the pervasive negativity bias does not mean that people are usually unhappy. Worldwide research on life satisfaction shows that as long as their basic survival needs are taken care of, most people are happy, most of the time (specifically, most people rate their happiness and satisfaction with their lives slightly above the neutral point on a scale). This is called the positivity offset: In the absence of a negative stimulus, people's average mood is not neutral, but slightly positive.

There is evolutionary justification for the positivity offset as well. Research shows that negative emotions lead to withdrawal, freezing, or behavioral rigidity, whereas organisms that feel positive emotions are inclined to explore their environment and seek out new resources or opportunities. Human ancestors who were slightly happy most of the time would have been more likely to seek out new food sources, allies, mates, or important information about their environment. These behaviors would not have immediately enhanced survival, making them less critical than the behaviors associated with negative emotions. But over time, their cumulative effects would have made individuals with a positivity offset better at surviving and reproducing than those without.

## **The Broaden-and-Build Theory of Positive Emotions**

The distinctions between positive and negative emotions discussed above can be seen in modern humans as well. Negative emotions have been found to *narrow* cognition and attention: people's visual search patterns quickly focus and fixate on threatening images; people under threat show greater behavioral rigidity; and negative emotions tend to narrow people's thought and action tendencies down to a specific, predictable range. Positive emotions, on the other hand, broaden visual search patterns and lead to big-picture perception of images, and people who have experienced positive emotions are more likely to seek new acquaintances, experiment with new behaviors, and think of more and more varied things they would like to do. This is referred to as the broaden effect of positive emotions: Negative emotions narrow people's thought-action repertoires, while positive emotions broaden them.

The long-term benefits of positive emotions have also been supported by evidence. People who experience frequent positive emotions – whether naturally or as a result of a randomized intervention – become physically healthier, develop closer relationships, and increase their psychological resources and resilience against bad experiences. People who experience chronic negative emotions without sufficient respite show poorer health, higher rates of mental illness, and progressive physical decline. This is not because negative emotions are inherently unhealthy. They are crucial for rapid response to threatening situations, or to responding appropriately to serious losses. However, their domain of effectiveness is fundamentally short-term. This is referred to as the build effect of positive

emotions: Negative emotions are optimized for response to immediate threats, while positive emotions are optimized for developing long-term benefits.

## **Health Effects**

Negative emotions typically evoke a physiological stress response, mediated primarily by the hormone cortisol and a variety of pro-inflammatory cytokines. This response is implicated both in the heightened heart rate and breathing seen in fear or anger, and the inaction and withdrawal seen in shame or depression. These changes take a toll on the body's resources: blood sugar is exhausted, immune function is reduced, and metabolic toxins are allowed to build up. In threatening situations, this represents a wise trade-off: the body withdraws resources from normal health maintenance to make sure that all available energy can be devoted to fighting, fleeing, or otherwise addressing the danger. Low-arousal negative emotions, such as shame and depression, may cause similar responses because they are adapted for unrewarding or resource-scarce environments in which it is unwise to engage in any activity, including physiological maintenance.

Once a threat is past, the body begins to counteract these changes and return to normal functioning. If a person's body is unable to return to normal functioning, or returns slowly, they increase their risk of illness or chronic disease. This is where the health effects of positive emotions have been detected: Once a stressor is past, experiencing positive emotions leads to faster physiological recovery. Over time, then, frequent positive emotions should help prevent overactive stress responses and the associated health risks.

## **Emotional Asymmetry and Positive Psychology**

Positive psychologists should be familiar with the asymmetric effects of emotions. Positive psychology often praises and encourages positive emotions, but this should be done with an awareness of context: eliminating negative emotion in response to immediate threats or serious losses is not productive. However, encouraging positive emotion in the time following a threat may be quite valuable. Research on resilience indicates that people who bounce back from difficulties do so partly by self-generating positive emotions in the aftermath of a negative experience. Grief is one of the most naturalistically complex negative emotions, and presents unique challenges: people who have lost a loved one show less depression if their mourning involves occasional positive emotions, but it requires a sophisticated emotional awareness to permit positive feelings without undermining the seriousness of one's loss.

Emotional asymmetry also plays a role in the debate over the role of emotions in the workplace. Some authors have claimed that happy workers are careless and uncommitted, while unhappy ones are detail-oriented and attentive. Others find

that unhappy workers are stressed and prone to errors, while happy ones are thoughtful and responsive. In order to address this debate, it is important to understand that the effects of positive and negative emotions do not form a single continuum from good to bad; each class of emotions has unique effects. For detail-oriented, precise, risk-averse processes, a serious and pessimistic environment may be appropriate. However, it cannot be sustained indefinitely: the exhausting, resource-burning effects of negative emotions will eventually harm workers and lead to burnout. Research indicates that a supportive, optimistic environment is conducive to innovation, high commitment, and awareness of new opportunities or sources of information, but may need to be suspended in specific, threatening circumstances. Thus, the balance of positive and negative emotions in work settings mirrors the balance within individuals: a negativity bias for responding to threat, and a positivity offset for optimizing everyday functioning.

SEE ALSO: ► Broaden-and-build theory of positive emotions ► Positive emotions

## Emotional Creativity

James R. Averill

*University of Massachusetts, Amherst*

Emotional creativity is the ability of people to develop new and more adaptive kinds of emotions. Conventional wisdom holds that emotions are biologically based, automatic responses over which we have little control. If that were true, there would be little opportunity for emotional creativity. But conventional wisdom can be misleading, particularly with respect to *discrete emotions* – those states recognized in ordinary language as “anger,” “grief,” “love,” “fear,” and the like. (Discrete emotions can be contrasted with indeterminate affective states such as excitation and depression.)

Discrete emotions are behavioral *syndromes*. The notion of a syndrome is familiar from its use in medicine. Measles exemplifies a disease syndrome, that is, a coordinated set of symptoms related to a specific origin (etiology) and following an expected course (prognosis). Emotional syndromes are logically (not *pathologically*) similar, except that the “symptoms” are more behavioral than physiological, the etiology is typically the way a person appraises the situation, and the prognosis is the way an episode commonly progresses toward some aim. For example, anger is a set of responses the aim of which is to correct an appraised wrong. Also, in the case of emotional syndromes, no single response, or type of response (e.g., instrumental act, expressive reaction, physiological change) is a necessary or sufficient condition for the whole.

To speak of a syndrome implies that responses are *organized* in a meaningful way. In the case of discrete emotions, the primary organizing principles are social

beliefs and rules. Biological principles (information encoded in the genes) and individual experience (encoded in memory) are also important. However, for all but the simplest emotions (e.g., sudden fright), socially shared beliefs and rules shape the final product.

Some beliefs that help shape emotional syndromes are factually correct; for example, when in love, people generally want to be together. Other beliefs are mythical: for example, that love lasts forever; or that there is only one “true” love. Needless to say, myths can lend meaning and significance to life, sometimes even more than factual beliefs.

Our beliefs about emotions not only describe what *is*, whether in fact or myth, they also prescribe what *should* – or *should not* – be. For example, you should not laugh during a funeral. In addition to regulating how we respond, many rules also have an enabling function. To illustrate with a nonemotional example, rules of grammar regulate how a person speaks “properly”; more fundamentally, they help constitute the language that is spoken. Thus, without the rules of English grammar, there would be no English language. Similarly, without the rules of anger, say, there would be no anger, only inarticulate expressions of rage or frustration.

To the extent that emotional syndromes are organized by beliefs and rules, they are subject to change: If the change is detrimental, we speak of neurotic syndromes; if beneficial, of emotional creativity.

## Criteria for Creativity

Csikszentmihalyi and Robinson (1986) wondered “what it would take to *create* talent in domains that are important to our survival, such as nurturance, wisdom, or frugality.” Their conclusion: “Perhaps all it would take is agreement on the criteria of performance, and then – as if by magic – talent will reveal itself” (p. 271). The criteria for judging a response as creative are threefold: novelty, effectiveness, and authenticity. Applying these criteria to the emotions, creativity reveals itself.

A response may be *novel* in comparison to typical behavior in a group or to an individual’s own past behavior. Most discussions of creativity focus on group comparisons. That is where genius is recognized. However, creativity is not unique to a few exceptional individuals. All learning and development involves the acquisition of novel behavior from the individual’s perspective; hence, creativity is a part of life and growth.

However, not all novel responses are creative; some are simply bizarre or eccentric. A creative response should be *effective*, that is, of potential benefit to the individual or group, and it should be *authentic*, that is, a reflection of an individual’s own values and beliefs, and not a mere affectation.

The above criteria are, to an extent, compensatory: An emotion that is exceptionally effective may be judged creative even though it is not remarkably novel or authentic; similarly, emotions that are exceptionally novel or authentic may be judged creative even if they are unexceptional in other respects.

## **Kinds of Emotional Creativity**

A brief digression: In so-called “found art,” an artist makes creative use of preexisting objects – a piece of driftwood, say. The object itself need undergo no change. Most artists, of course, are not content simply to use preexisting items in creative ways. Pursuing the above example, the piece of driftwood may be sculpted to give it a particular shape, one that conforms to some cultural standard (e.g., as a ceremonial mask or figurine). This is the most usual kind of art. Going further, an artist may break with tradition and develop a new form of expression, one that appears at first strange or “unnatural” within the cultural context.

As with art, emotional creativity admits of kinds. At the simplest level, emotional creativity involves the particularly effective application of a preexisting emotion, one that is found within the culture; at a more complex level, emotional creativity involves the modification (“sculpting”) of a standard emotion to better meet the needs of the individual or group; and at the highest level, emotional creativity involves the development of new emotional syndromes. The latter (transformational) type of emotional creativity is the most difficult to describe in ordinary language. It does, however, provide the grist for fine poetry.

## **Supporting Evidence**

Theoretically, the idea of emotional creativity is based on a social-constructionist view of emotion as extended to individual development. To the extent that beliefs and rules help organize emotional syndromes, new emotions can be created by changing those beliefs and rules. Succinctly put, what societies construct, individuals can reconstruct.

Empirically, evidence for emotional creativity falls into three main categories: the dialectic between emotion and culture; individual differences in the ability to be emotionally creative; and improvisations during the course of emotional episodes.

### **The Dialectic between Emotion and Culture**

Some of the best evidence for emotional creativity comes from historical and cultural differences in emotional syndromes. But identifying cultural differences is only a beginning. As evidence for emotional creativity, the most relevant evidence involves “thick” descriptions in which emotional syndromes are dialectically related to the culture of which they are a part. The research of Catherine Lutz on the emotional life of the Ifaluk, a people of Micronesia, provides a good example. Detailed analyses of emotions such as anger, grief, hope, and love within our own culture are similarly relevant.

## Individual Differences

Cultural differences could not arise were it not for the ability of individuals within a culture to introduce variations on “received” emotional syndromes. Individual differences in emotional creativity are relatively independent of extraversion and neuroticism, personality traits that are related to positive and negative emotionality, respectively. Compared to their less creative – but not necessarily less reactive – peers, people who are emotionally creative place greater importance on, and awareness of, their own and others’ emotions; are better able to express unusual emotions symbolically in words and pictures; report greater frequency of unusual, mysticlike experiences; and benefit more from solitude, a condition traditionally associated with creative pursuits.

## The Development of Emotional Episodes

Except for very short-term emotions, such as sudden fright or lashing out at the source of pain, most emotions show considerable leeway in the way they develop during the course of a single episode. This is to be expected since the beliefs and rules that help organize an emotional syndrome are open-ended, thus allowing ample room for improvisation. In computer-science terms, emotional episodes are constructed “online.” As an episode develops, the person has recourse to a large database of experience previously stored in memory, as well as the general beliefs about the emotion and its consequences. Depending on the situation and the person’s motives and goals, only a subset of this stored information may be accessed in any given episode. Hence, no two episodes of an emotion are exactly alike.

## Becoming Emotionally Creative

Years of preparation are typically required before an individual can be creative within a given domain. Emotional creativity is no exception. People who consider emotions important to their lives, and thus think about and try to understand their emotions, are more emotionally creative than others who are more indifferent (but not necessarily less reactive). The technique of method acting, where aspiring actors practice experiencing as well as expressing emotions, also illustrates the potential importance of preparation. To a certain extent, we are all method actors. Our training is not formal, of course, but as children and later as adults, we learn from parents, teachers, and peers how to be emotional in accordance to the beliefs and rules of society, upon which we can then improvise. Popular culture (e.g., as manifested in stories and songs) is also an important means of emotional preparation. But perhaps most important is direct experience with emotionally arousing events, and reflection on, or learning from, those experiences.



## Emotional Creativity and Emotional Intelligence

The ability to be emotionally creative is not distinct from other abilities. Perhaps most relevant is emotional intelligence. In domains such as science and literature, a degree of cognitive intelligence is necessary for creativity; however, beyond a threshold necessary for success in a field, there is only a modest relation between intelligence as measured by IQ tests and cognitive creativity. The same appears to be true of the relation between tests of emotional intelligence and emotional creativity. One possible reason for only modest relation between emotional intelligence and emotional creativity is that the former is “convergent” and the latter “divergent.” That is, emotional intelligence assumes a correct way to respond, as indicated by conformance to group standards. Conformance to the tried and true may facilitate effectiveness, but it downplays the importance of novelty and authenticity.

SEE ALSO: ► Creativity ► Csikszentmihalyi, Mihaly ► Emotional intelligence ► Positive illusions

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## Emotional Development

Eric W. Lindsey  
*Penn State Berks*

Emotional development refers to the process by which humans acquire the ability to experience, express, and interpret positive and negative emotions. Positive emotions and the use of strategies for coping with negative emotions represent important areas of focus for the field of positive psychology. Researchers such as Barbara Fredrickson and Alice Isen have drawn attention to the fact that positive emotions promote strength and character, solidify social bonds and build psychological resilience. Likewise, researchers such as Annette Stanton and Jamie Pennebaker have revealed insights into the beneficial effects produced by effective strategies for coping with negative emotions. However, it is clear that the experience of emotions, and the methods that individuals use to cope with emotional experiences, vary with age. To appreciate fully the role that positive and negative emotions play in psychological adjustment it is important to understand the age-graded changes in emotional development.

Theoretical and empirical evidence suggests that in the first two months of life infants' emotional experiences are confined to pleasure and distress. Gradually, however, the basic emotions of happiness, interest, surprise, fear, anger, sadness, and disgust begin to emerge. By three months of age, infants display joy, which takes the form of social smiles in response to seeing a human face. Such expressions of happiness are thought to create a warm and supportive relationship between parent and child that promotes the infant's developing competencies. Laughter also first appears around 3 months, typically in response to some active stimulus from the environment.

Interestingly, negative emotions appear somewhat later, with anger and sadness emerging between 4 and 6 months, and fear emerging in the latter half of the first year. Infants tend to react with anger in a wide range of situations, when their effort to accomplish some task is thwarted. In contrast, expressions of sadness tend to be limited to instances when infant-caregiver interaction is disrupted. Infants respond with fear to unexpected or dangerous situations, such as loud noises. Fear is most frequently seen in infant's reaction to unfamiliar adults, which has been labeled as stranger anxiety. Such fears are considered to have adaptive value in that they help to keep the newly mobile infant's enthusiasm for exploration in check.

A major competency to emerge at the end of the first year is emotional self-regulation, or the ability to adjust one's emotional states to a comfortable level of intensity. Changes in the cerebral cortex, together with a supportive and nurturing environment, promote children's voluntary, effortful management of emotions, known as *effortful control*. Physical and motor development also contribute to improvements in self-regulation and effortful control, by providing infants with the ability to regulate feelings by approaching or retreating from emotionally arousing stimuli. Infants' ability to actively seek emotional information from trusted caregivers, known as *social referencing*, also plays a role in their emotional self-regulation.

Emotional development during toddlerhood is marked by the emergence of self-conscious emotions, such as guilt, shame, embarrassment, envy, and pride. It is during this time that children develop an awareness of themselves as a separate, unique individual, and become cognizant of the fact that others are evaluating their behavior. This awareness, together with a strong desire to please their caregivers, leads children to link particular emotional states to specific behaviors. Information concerning which behaviors should be linked to which emotional state is derived largely from caregiver's reactions. In this way, self-conscious emotions help children acquire the moral behaviors and goals that are valued in their culture.

With most of the basic and complex emotions in place by the end of the second year, preschool age children experience steady improvements in skills that make up emotional competence. One such skill is emotion understanding, an ability that allows children to accurately talk about feelings and respond appropriately to others' emotional signals. Another emotional competency that

continues to improve during the preschool years is emotional self-regulation, especially coping with intense negative emotion. By age 3 to 4, emotional outbursts decline as children become able to verbalize strategies for adjusting their emotional arousal to a more comfortable level.

During middle childhood, children gain a more sophisticated understanding of emotions as internal feeling states that are not necessarily tied to facial expressions or particular events. As a result, children begin to realize that people's expressions may not reflect their true feelings, and they can reconcile contradictory facial and situational cues in figuring out someone else's feelings. They also begin to recognize that individuals can experience multiple emotions at the same time, and that the different emotions can be either positive or negative. Also at this age the self-conscious emotions of pride and guilt become clearly governed by a sense of personal responsibility and no longer depend on adult monitoring.

An increase in social comparisons and concern for peer approval produces rapid gains in emotional self-regulation during middle childhood. By age 10, most children display two general strategies for managing emotion. In problem-centered coping, children appraise the situation as changeable, identify the difficulty, and decide what to do about it. If this strategy is unsuccessful, they engage in emotion-centered coping, which is internal, private, and aimed at controlling distress when little can be done about an outcome. When school-age children acquire a feeling of being in control of their emotional experience, known as *emotional self-efficacy*, it fosters a favorable self-image and an optimistic outlook in meeting emotional challenges.

The onset of adolescence is marked by relatively sudden changes in both positively- and negatively-valenced affect. In the early years of adolescence there is a peak in the intensity and/or frequency of negative emotion. Young adolescents also experience less positive emotions. Traditionally, adolescence is known as an age of increased moodiness, and this is attributed to hormonal changes that occur with the onset of puberty. However, recent research indicates that the dramatic changes in mood during adolescence may be more linked to changes in sleep patterns, higher expectations from adults, and increased variety in daily activities, than to physiological processes. Whatever the reason, it is clear that the incidence of dysphoric or depressed moods radically increases during this time.

The social aspects of emotion expression and regulation become more developed during adolescence. For example, there are increases in the ability to mask emotions, as well as in the use of emotion to manage relationships. The social referencing aspects of emotion also become highly attuned. Adolescents demonstrate a sharp increase in the awareness of other's perceptions of them, and therefore experience shame more frequently. Recent evidence also suggests that adolescents experience increased sensitivity to stress and a decreased sensitivity to rewards, compared to younger children.

SEE ALSO: ► Emotional intelligence ► Emotions ► Fredrickson, Barbara  
► Positive emotions ► Self-regulation

## Emotional Intelligence

Marc A. Brackett, Alia Crum, and Peter Salovey

*Yale University*

While the Stoic philosophers regarded emotions as irrational and too self-absorbing to be useful, the Romantic movement of the eighteenth and nineteenth centuries gave rise to the idea that emotion-related phenomena such as empathy and intuition provided useful information that was unattainable through rational thought alone. In the twentieth century psychologists and philosophers still debated whether emotions were disorganized interruptions of mental activity or whether they contributed to logical thought and intelligent behavior. John D. Mayer and Peter Salovey's theory of emotional intelligence (EI) is grounded in the latter, functional view of emotion – that emotion should not be put into opposition with intelligence, but be viewed as a mental ability that facilitates the processing of emotion-related information and enhances cognitive activities and social functioning.

Currently, there are two distinct models of EI: ability models and mixed models. The ability model espoused by Mayer and Salovey conceptualizes EI as a set of mental skills pertaining to the perception, use, understanding, and management of emotion. Mixed models, on the other hand, are based primarily on popular depictions of EI and include two classes of constructs: perceived emotional (and other) competencies and personality traits. While the traits and competencies covered in mixed models are important and predictive of important life outcomes, these models diverge considerably from a primary focus on emotion and intelligence. In our view, keeping EI restricted to an ability model allows one to test empirically the degree to which emotional abilities contribute to positive social functioning.

### What is EI?

Both the theory and application of the ability model of EI are linked inherently to positive psychology: EI contributes to human flourishing through intra- and interpersonal growth and intellectual and occupational success.

#### The Ability Model of EI

Mayer and Salovey defined EI as the processes involved in perceiving, using, understanding, and managing emotions to solve emotion-laden problems and regulate behavior. These four domains are viewed as forming a hierarchy, increasing in complexity from emotion perception to management. One's overall EI is the combination of the four abilities. The ability model discussed here is distinct from trait or other models of EI which define and measure EI as a set of personality characteristics and perceived capacities.

*Perceiving emotions*, the first domain, pertains to the ability to identify emotions in oneself and others, as well as those evoked by objects, stories, music, and other stimuli. The most basic aspects of this ability are identifying and differentiating emotions in one's feelings, thoughts, and physical states, and expressing associated needs. At a more advanced level, this ability involves identifying emotions in other people using cues such as sound, appearance, language, and behavior; thus, enabling a person to discriminate between sincere and insincere emotional expressions and to be empathetic toward a grieving friend.

How can people utilize the emotions that they notice in themselves and others in order to reap maximum benefits? The second domain, *using emotions*, draws on emotion to focus attention and think more rationally, logically, and creatively. Due, in large part, to what positive psychology has already accomplished, the usefulness of soft concepts such as happiness, hope, courage, gratitude, or enjoyment is now recognized. Indeed, emotions can prioritize the cognitive system to attend to what is important, and help individuals focus on the best tasks to complete in a given mood. According to Barbara Fredrickson, positive emotions are not just reflections of optimal functioning – they actually produce it, both broadening a person's mindset so that novel and creative responses are more likely and building resiliency to prepare for the future.

Emotionally intelligent people attend to and comprehend their own and others' emotions, furthering the path toward growth. Thus, the third domain, *understanding emotion*, includes a vast knowledge of the emotion lexicon and the manner in which emotions combine with, progress, and transition from one another. The person who is able to understand emotions – their meanings, how they blend together, how they progress over time – is gifted with the capacity to understand important aspects of human nature and interpersonal relationships.

The fourth skill of EI is *managing emotions*, or the ability to regulate moods and emotions in oneself and in other people. When managing one's own feelings, one must be able to monitor, discriminate between, and label one's feelings accurately; believe that one can improve or modify these feelings; employ strategies that will alter one's feelings; and assess the effectiveness of these strategies. Central to emotion management is the ability to reflect upon and manage one's emotions. Emotional disclosure and acceptance and mindfulness practices have all proven to be useful for managing emotions. In general, the most successful regulation methods involve expenditure of energy; active mood management techniques that combine relaxation, stress management, cognitive effort, and exercise may be the most effective strategies for changing bad moods.

### Measuring EI as a Mental Ability

EI is best described as a set of abilities and is therefore best measured by performance-based instruments. The Mayer-Salovey-Caruso EI Test Version 2.0 (MSCEIT) was designed to measure the four emotion-related abilities delineated by the four-branch model. The MSCEIT consists of 141 items that are divided among eight tasks (two

for each branch) which yield seven scores: one for each of the four branches, two area scores (Experiential EI, consisting of perceiving and using emotions, and Strategic EI, consisting of understanding and managing emotions), and a total EI score.

The MSCEIT has a factor structure congruent with the four domains of the theoretical model, and the test is reliable at the full-scale level ( $r_s = .90$  to  $.96$ ), the area level ( $r_s = .84$  to  $.91$ ) and the domain level ( $r_s = .74$  to  $.91$ ). The MSCEIT also predicts a wide range of important criteria.

## **The Benefits of EI**

EI can help one to flourish in all aspects of life, including intra- and interpersonal functioning (e.g., mental and physical health, developing satisfying relationships with friends and loved ones), intellectual functioning (e.g., academic success), and occupational success (e.g., optimal performance at work).

### **Intra- and Interpersonal Flourishing**

Because emotions provide information about one's relationship with the environment and others, interpreting and responding to that information can direct action and thought in ways that enhance or maintain well-being. Among college students, MSCEIT scores correlate positively with well-being. People high in EI have lower rates of anxiety and depression. Individuals higher in EI, and the managing emotions subcomponent in particular, also tend to be better at affective forecasting, or predicting how they will feel in the future.

EI is postulated to promote positive social functioning by focusing attention on important information in the environment, facilitating the ability to adopt others' perspectives, enhancing communication about emotions, and regulating behavior. Individuals with higher MSCEIT scores tend to have more friends and better relationships with those friends; they also tend to experience less conflict and antagonism with friends and family members. Romantic couples with higher MSCEIT scores tend to report less negative interactions and greater happiness within their relationship than couples with both partners who are lower in EI. Similar results were found in studies using diary methods and ratings by friends and observers to assess social relationships; those who were high on the emotion management component of the MSCEIT, in particular, were rated by their friends as providing more emotional support to the relationship, and having a relationship that is replete with intimacy, affection, and admiration. Men with higher MSCEIT scores were rated by observers as being more socially competent and engaged in social interactions.

### **Intellectual Flourishing**

EI is hypothesized to predict cognitive functioning because the abilities allow individuals to garner emotions to facilitate thinking and regulate emotions in order to focus on important information. MSCEIT scores correlate moderately

with verbal SAT scores, verbal intelligence as measured by the Weschler Adult Intelligence Scale-III, reasoning ability, academic giftedness, and general intelligence measures. In their meta-analysis of 18 studies that used the MSCEIT or its predecessor test, the Multi-Factorial EI Scale, Van Rooy and colleagues report a correlation of .34 (after correcting for unreliability in measurement) between EI scores and assessments of verbal and spatial intelligence.

Emotion-related skills are hypothesized to prioritize thinking and enable one to manage emotions in anxiety-provoking situations such as while taking a test. The evidence supporting the relationship between EI and school achievement is mixed. While some studies report no correlation between MSCEIT scores and school grades, a new study with a high school student sample reported that the Spanish Version of the MSCEIT, administered at the start of the academic year, predicted final grades after controlling for personality and academic intelligence. It is possible that the findings from high school students are stronger due to a restricted range of IQ scores in college student samples, which attenuate associations.

### Occupational Flourishing

EI influences the capacity to interact and communicate effectively with others as well as the ability to manage conflict, handle stress, and perform under pressure. For these reasons, EI is predicted to be instrumental in leadership and workplace behavior. In a Fortune 500 insurance company, analysts and clerical employees from the finance department with higher MSCEIT scores received greater merit increases and held higher company rank than their counterparts who had low EI. The employees with high EI also received better peer and/or supervisor ratings of interpersonal facilitation, stress tolerance, and leadership potential than their counterparts. With few exceptions, these associations remained statistically significant after controlling for other predictors, including age, gender, education, verbal ability, and personality traits. Among currently or recently employed undergraduates, MSCEIT scores also significantly predicted supervisor-rated job performance after controlling for cognitive intelligence. Finally, the total MSCEIT scores of 41 senior executives predicted leadership effectiveness as rated by managers.

## Developing EI

How does one go about improving emotion-related abilities to promote optimal potential? Currently, interventions aimed at raising EI are being developed in education and workplace settings.

### Interventions in Education

Successful schools ensure that students master basic skills such as reading and math, but recently educators have begun to support a broader agenda – one that enhances teachers' and students' social and emotional skills (SEL). Incorporating

social and emotional learning programs into school districts can be challenging, however, as the programs should include training for both teachers and students, and receive backing from all levels of the district (i.e., superintendent, principals, and teachers). Additionally, the programs should be field-tested, evidence-based, and founded on sound psychological and educational theory.

A majority of SEL programs focus on preventing or ameliorating social conflict and social skills deficits, but do not address the underlying emotion-related skills that may foster improved academic performance and healthy social development. Over the past decade, Marc Brackett and colleagues have addressed this shortcoming by developing curricula for school administrators, teachers, and students. The programs are anchored in EI theory and recent developments in emotional literacy, the aspects of EI that are acquired through formal instruction in school, much the same way as general literacy is.

One program, Emotional Literacy in the Middle School, has been implemented in schools throughout the United States and United Kingdom. This program aims to help students ages 10 to 13 become emotionally literate by broadening their vocabulary and understanding of emotion concepts. Students learn to recognize, understand, label, express, and regulate emotions through myriad activities such as interpreting and analyzing emotions of television characters and music, creating collages or mobiles as related to various facial displays of emotion, and participating in discussions about appropriate strategies that can be used to enhance positive emotions and modify negative ones.

Administrators, teachers, and students exhibit positive reactions to the programs. Empirical investigations support these positive impressions. In one study, fifth and sixth grade students who were instructed in emotional literacy for seven months (as compared to a control group) had higher end-of-year grades in science, reading, and writing, as well as higher grades in "work habits," which is comprised of subcategories including, "works cooperatively," "follows directions," and "demonstrates self-control."

### Interventions in the Workplace

Programs to increase EI abilities also can be found in the workplace. David Caruso and colleagues have developed a series of training modules and workshops designed to teach EI abilities (i.e., perceiving, using, understanding, and managing emotion). Their curriculum includes group and individual exercises that increase awareness and understanding of EI. Skill practice is a central part of the workshop. Perceiving emotions is taught by having participants observe each other expressing emotions. Using emotions is learned through experiential tasks which induce various moods and require participants to reason or solve problems. Word games are included to enhance participants' ability to understand emotions. Finally, managing emotions is taught with exercises that expose participants to mood-inducing images which then require them to employ emotion management strategies to either display or suppress emotions. Moreover, case studies and role



plays are used to teach participants to employ the four abilities in a sequential, emotion-based problem solving model known as the *emotional blueprint*. This easy-to-learn strategy can be readily utilized in a wide variety of situations.

To test whether EI abilities can be learned, Kelly Chang implemented a semester-long intervention for college students. During the semester, participants in the intervention group attended a training during which they selected a target behavior to focus on based upon the results of EI assessments and then generated a self-directed change plan. Participants in the control group spent the same amount of time in a basic training of general psychology. Lectures, assignments, and exercises from Caruso and colleagues' curriculum were part of the intervention group training. Participants met one-on-one with the course instructor, as well as in topic-based support groups and had to write a paper about the results of their training. Results of her experiment showed increases in MSCEIT scores in two domains (Understanding and Managing Emotion) for the intervention group, but not the control group.

## The Future of EI

Despite the burgeoning of research on emotional intelligence, many unaddressed questions remain. The value of all four domains of EI seems to depend heavily upon how well the user adapts to the context in which the skill is needed. Being emotionally intelligent is more than just possessing the skills and abilities described in the four-part model, but also having the capacity to utilize them appropriately in a given situation.

More research is needed on how EI influences optimal performance across life dimensions and throughout the lifespan. It would be beneficial to investigate the extent to which EI is associated with elements influential to well-being such as flow, self-esteem and self-efficacy, mindfulness, and gratefulness. Additionally, research is needed on how EI relates to the development and achievement of self-concordant goals, which have proven to predict both work satisfaction and success.

SEE ALSO: ► Affective forecasting ► Emotional development ► Emotions  
► Organizational psychology, Social skills

## Emotions

Anna L. Kratz,<sup>a</sup> Mary C. Davis,<sup>a</sup> Alex J. Zautra,<sup>a</sup> and  
Howard Tennen<sup>b</sup>

<sup>a</sup>Arizona State University; <sup>b</sup>University of Connecticut School of Medicine

The definition of *emotion* changes from one researcher to the next; however, the prevailing definition is that emotions are multicomponent response tendencies that

can involve cognitive appraisals, physiological responses, facial expressions, and the experience of subjective feelings.

Following World War II, applied psychology emerged as a discipline devoted to understanding and treating mental health problems. As part of this focus, researchers and clinicians alike gave much of their attention to negative emotions like sadness, anger, and fear. This perspective resulted in an incomplete understanding of what characterizes human well-being, growth, and resilience. Recognition of the value of positive emotional engagement for health gained traction in the 1970s through contributions of scientists like Lewinsohn, laying the foundation for the recent focus in positive psychology on positive emotions like joy, contentment, and interest. Some of the most intense and long-standing debates in the field have centered on very basic attributes of emotions: their form and function and the interplay between biological and cognitive aspects of emotions. The relatively new inclusion of positive emotion as a major research focus in conjunction with advances in research techniques and technologies has resulted in greater clarity about the role of positive and negative emotions in mental and physical health.

## Definition of Emotion

Language is very important in the science of human emotions. Some terms are used interchangeably among laypeople but are distinct and their use is often disputed among researchers. *Mood* is considered more enduring and “free floating” (i.e., not tied to a person’s momentary experience), compared with emotion. *Affect* is sometimes used interchangeably with emotion, even in the research literature. Among researchers, affect reflects the motivational component of feelings (e.g., approach or withdraw) whereas emotion is indicative of the experiential component of feelings (e.g., fear, disgust). Among clinicians, affect refers to a person’s outward display of emotion, i.e., “constricted affect.” The English language contains relatively few words for positive emotions compared with many nuanced terms for negative emotions. Carroll Izard, like many psychologists who catalog and describe basic emotion terms, included only two positive emotions, interest/excitement and joy, among the ten emotions he identified as basic emotions.

## Theories of Emotion

The aim of emotion theorists has long been to uncover the form and function of emotions. Disagreements about the form of emotion often center on how the negative and positive aspects of emotion relate. Some say that emotions lie along a single continuum that ranges from positive to negative. According to this model, if you are on the pleasant end of the spectrum, then you cannot possibly

be sad, angry, fearful, etc. The circumplex model of emotion is consistent with this notion and has two axes, one depicting quality of emotion from unpleasant to pleasant, and the other indicating intensity of emotion, spanning from high to low activation. Other researchers have argued that people are capable of having complex emotional experiences, simultaneously comprised of positive and negative emotions. In this vein, Watson developed a bi-dimensional model that depicts positive and negative affects on separate and intersecting axes, both ranging from high to low activation or intensity.

In the 1960s, Bradburn and Caplovitz were among the first to find evidence that an individual's positive and negative emotional experiences are independent. Since then, the body of research supporting the bi-dimensional model of emotion has grown steadily. Fredrickson has argued that the very different functions of positive and negative affect necessitate separate models for each. In an effort to capture the unique function of positive emotions, she developed the broaden-and-build model, which provides a framework for understanding how positive emotions broaden an individual's "momentary thought-action repertoire" by increasing attention, openness, and working memory ability, and build lasting personal resources.

The dynamic model of affect proposed by Zautra and colleagues casts a different light on whether positive and negative emotions are opposites or qualitatively different. In this model, positive and negative affective states vary in the degree to which they are independent as a function of context. Zautra and his colleagues have amassed evidence that during times of stress positive and negative affect become more inversely related, suggesting a more uni-dimensional experience of emotion. Moreover, they have found that positive interpersonal events offset the effects of stress by increasing the bi-dimensionality of affective experiences. Emotion regulation may be particularly difficult for chronic pain patients, and they recommend approaches, like mindfulness meditation, that increase capacity for awareness of positive emotions even during the stress of pain episodes.

Evolutionary psychologists emphasize how emotions have helped humans adapt and survive over time. These theorists define emotions as motivational states or specific action tendencies. For example, fear is associated with the urge to escape and flight behaviors. Anger is associated with the urge to attack and with fight behaviors. Positive and negative emotions may play very different roles in the evaluation of a stimulus and motivation to approach or withdraw from it. Positive emotions contribute to the *positivity offset*, the tendency for humans to be curious about their environment and motivated to approach and explore even in the absence of stimulation. This tendency has propelled humans to explore and learn. Negative emotions contribute to the *negativity bias*, the tendency to more readily and quickly react to negative stimuli. The negativity bias serves to protect people from injurious or fatal errors.

Based on the belief that emotions result from rather than cause behavior, James and Lange proposed a century ago that emotions arise when a person observes and then labels physical reactions to stimuli. For example, seeing a bear would

result in a sympathetic nervous response and the urge to run, which could be labeled “fear.” According to this theory, the physical state of arousal and the behavior of running precede and precipitate the emotion. There are problems with this theory, however, as most human behaviors are not linked to just one emotion. One can both run toward a desired object or away from a feared object. Prominent theorists, Schachter, Singer, and Cannon, all proposed that emotion arises from cognitive appraisals of physical sensations and the context in which the sensations take place. A racing heart and sweaty palms may carry very different emotional meanings in the context of a romantic interest versus a growling tiger. This cognitive approach has become the foremost modern perspective on emotion, and many psychologists believe that emotion begins with the mental evaluation of an event. There are problems with the cognitive approach to emotions. Zajonc’s work, for example, has shown that conscious processes are not necessary for emotions to arise and people report changes in emotions following exposure to subliminal images. There is other evidence that emotions are not simply mental constructions. Basic emotions are communicated through facial expressions that are constant across cultures and even across some species. Chimps, for instance, are able to demonstrate facial expressions similar to those of humans for anger, sorrow, and other emotions.

## **Emotions, Physiology, and the Brain**

Descartes, considered the founder of modern philosophy, proposed that the mind is ethereal and functions separately from the body that works like a machine. Today, this dualistic formulation has been replaced with the notion that the mind and body are a single entity. The mind/body connection holds implications for emotion researchers, many of whom have begun to study the biological and neurological substrates of emotion. Emotional states are associated with markers of autonomic system arousal, such as increased skin conductance, muscle tension, blood pressure, heart and respiration rate, and altered brain waves. In addition, some theorists suggest a bidirectional relation between physiology and emotion such that specific physiological processes correspond with specific emotions and that each can precipitate changes in the other. Research supports this theory with evidence that emotions like joy and anger result in different patterns of respiration. Likewise, initiating specific respiration patterns can instigate corresponding emotions.

Great efforts have been directed at identifying neural structures associated with various emotions. The limbic system, a group of subcortical brain structures including the amygdala, fornicate gyrus, and hypothalamus, has been identified as the emotional center of the brain, and mediates immediate, and short-lived *primary emotions*, such as the instantaneous fear of snakes. In humans and some primates, the emotion regulation system includes significant projections to cortical areas and incorporates memory, learning, and cognitive evaluation of events to arrive at an

emotional response. Craig has recently proposed a model of emotion following homeostatic principles, with ascending and descending central nervous system pathways integrated to serve the needs of the organism.

Neuroscience has provided considerable evidence of the separability of positive and negative emotions. For example, the right and left hemispheres respond differentially to positive and negative emotional stimuli. Using brain imaging technology, Davidson found that people who experienced extreme levels of positive emotion had more activation of their left frontal cortex than those who had extreme deficits of positive emotion. Similarly, he found that damage to the left frontal lobe was related to increased risk for depression whereas damage to the right frontal lobe was associated with increased likelihood for mania. Other researchers have focused on distinctions in neural substrates corresponding to sensory versus affective/motivational and cognitive aspects of emotional experience. Thus, sensory aspects may correspond with activation in the somatosensory cortex, the interoceptive “feelings” may correspond most with anterior insula activation, and motivational and cognitive aspects of emotion response regulation appear to extend to anterior cingulate cortex. Future discoveries may indicate that the neural organization of emotion is organized like Luria’s primary, secondary, and tertiary areas for projection and integration of sensory modalities like vision and audition.

## Measuring Emotions

The science of emotions has advanced in recent years through the refinement of measurement tools and techniques. Psychologists have standardized emotional stimuli (e.g., images, films, words, sounds) often used in experimental studies. Advances in hand-held computer devices have allowed for sophisticated moment-to-moment field assessment of emotions, lending ecological validity to emotion research. The use of brain imaging technology, such as positron emission topography (PET) and functional magnetic resonance imagery (fMRI) has aided in exploration of the interplay between subjective emotional experiences and neurological phenomena.

Researchers commonly use self-report measures to capture the subjective experience of emotion. Among the most popular self-report measures is Watson and Clark’s expanded form of the Positive and Negative Affect Schedule (PANAS-X). Respondents indicate the extent to which they are feeling any one of the 10 positive and 10 negative emotions on a scale from 1 to 5.

## Value of Positive Emotions: Health and Resilience

Recent discoveries have demonstrated the key role that positive emotions have in determining mental and physical well-being. Positive emotions have been reliably

linked to reduced risk for morbidity and mortality. Positive emotions experienced in parent–child and spousal relationships are related to lower allostatic load (i.e., cumulative wear on the body) later in life. Cohen found that individuals who reported feeling high levels of positive emotion on a regular basis had a more robust immune response following exposure to the common cold virus and were less likely to develop cold symptoms than those who did not have a positive emotional style. Other evidence suggests that positive emotions and laughter, a behavioral expression of joy, are related to cardiovascular health as measured by improved survival rates among cardiac patients, increased blood flow to the heart muscle, and healthy functioning of blood vessels. Danner, Snowden, and Friesen made news headlines with their longitudinal study of 678 nuns in the United States. The researchers found that those nuns whose autobiographies, written upon entry into the convent, were high in positive emotional content exhibited greater longevity 6 decades later.

Positive emotions enhance the ability to bounce back or be resilient in the face of hardship and stress. For example, bereaved individuals who exhibit higher levels of positive emotions are better able to set long-term goals and make plans following their loss. Likewise, chronic pain research has shown that positive affect plays a unique role in buffering against increases in negative emotion during times of increased pain and stress. Positive emotions are reciprocally related to finding positive meaning in both ordinary and adverse life events, and have been shown to improve problem-solving abilities, cognitive attention, memory, and the tendency to respond flexibly to challenges. Moreover, positive emotions are able to undo the physical effects of a stressful event by hastening cardiovascular and biochemical recovery. Clues about how positive emotions contribute to resilience clearly point to the importance of considering the positive aspects of emotional life in the quest to promote health and well-being.

SEE ALSO: ► Emotional approach coping ► Emotional development  
► Emotional intelligence ► Positive affectivity ► Positive emotions

## Empathy

E. L. Stocks<sup>a</sup> and David A. Lishner<sup>b</sup>

<sup>a</sup>*University of Texas at Tyler*; <sup>b</sup>*University of Wisconsin Oshkosh*

Generally, empathy encompass processes that are responsible for, or that result from: a) imagining what another person is thinking and feeling; b) a broad range of perceptual, cognitive, and affective responses to events in the lives of others; or c) both. To make sense of the term empathy and the role it plays in human behavior, it is useful to differentiate the many ways that psychologists have used the term.

## Definitions of Empathy

### Empathy as Imagining Another's Internal States

The term "empathy" was coined by Titchener as a translation of Lipps' concept, *emföhlung*. Both terms referred to the process by which an individual actively projects or "intuits" his or her way into another person or object, thereby experiencing a situation from the other's point of view. This early conceptualization of empathy emphasized the process that results in a person deliberately stepping outside of oneself to acquire an accurate understanding of another's psychological world.

In this respect, empathy is similar to role taking or perspective taking. Defined in this way, empathy may refer to at least two distinct activities. First, one may imagine what another is thinking and feeling as a consequence of a situation, based solely on that person's current values, goals, resources, and the like. Second, one may imagine him- or herself in the other's situation. The former activity has been labeled an *imagine-other* perspective, and the latter, an *imagine-self* perspective. Although these two approaches to understanding another's internal states appear similar, research suggests that the two have different emotional, motivational, and behavioral consequences and should remain conceptually distinct.

### Empathy as Matching Another's Behavioral Responses

Another variation on the concept of empathy describes it as the process by which one matches another's behavioral responses, such as bodily postures, emotional expressions, and physical activities. Some refer to this view of empathy as *motor mimicry* or *imitation* to reflect this behavioral form of matching.

More recently, neuropsychological research suggests that behavioral matching may go beyond motor mimicry or imitation. According to Preston and de Waal's Perception-Action Model, matching at the level of neural representations is central to empathy. Due to the automatic link between perception and action, simply perceiving another's responses results in a pattern of neural activation similar to what would occur if one were responding in the same manner oneself. It is important to note, however, that the neural matching is far from complete, and that empathy involves a "decoupling mechanism" that differentiates one's own experiences from those of the observed other.

The processes discussed so far bear some degree of conceptual overlap, but it is important to note their differences. Whereas empathy as perspective taking is an account of how an individual attempts to form an understanding of another's psychological world, empathy as behavioral or neural matching are accounts of mechanisms by which such an understanding may be possible. It is also important to note that perspective taking or behavioral matching does not necessarily lead to an accurate understanding of the other. For example, in many situations

behavioral matching reflects a goal-directed act that serves to communicate support to the other rather than an automatic imitative act. Likewise, one need not match or imitate another's responses in order to understand them. Humans are quite adept at communicating what they are thinking and feeling, and one often needs only to listen to the other in order to gain accurate knowledge of his or her internal states.

### Empathy as Feeling what Another is Feeling

A number of cognitive scientists, psychologists, and philosophers define empathy as feeling the same thing that another is feeling. It was, however, more common for research conducted prior to the 1950s to employ the term *sympathy* rather than *empathy* to describe such shared emotional responses. Since that time, researchers have coined a number of phrases to emphasize the unique characteristics of this process, such as "emotional contagion" or "parallel responding." This view of empathy is potentially problematic in that it is unclear whether an observer must experience an emotional response that (when compared to that of the other) is of either exactly the same tone, exactly the same valence, exactly the same intensity, or some combination of the three in order to qualify as empathy. It is also unclear whether the observer must experience *only* the emotional response of the other, or if experiencing it plus additional emotional responses still qualifies as empathy.

### Empathy as Being Upset by Another's Situation

To witness another individual suffering can, under certain circumstances, produce feelings of distress or anxiety. Such feelings have been labeled empathy by a number of researchers, especially when the other's suffering is either graphic or extreme. However, this emotional response is not experienced *for* the other. Rather, it is experienced *for* oneself. Given the difference in focus of empathy and distress, recent research on the topic maintains a conceptual distinction between these feelings even though they may be produced by the same situation. Research also suggests that each leads to distinct motivational and behavioral consequences, further highlighting the need to separate empathy from the distress that may accompany it.

### Empathy as Feeling for Another

Another common definition of empathy is "feeling a vicarious emotion that is congruent with but not necessarily identical to the emotion of another" (Batson, 1991, p. 86). This view of empathy highlights the distinction noted above regarding distress – empathy is felt *for* another, whereas distress is felt *for* oneself. Another important feature of this view of empathy is that it broadens the scope of potential empathic emotions. Although empathy is typically construed as an emotion



experienced when witnessing another suffering, it is also possible to respond with empathic joy when the other is experiencing positive states, with empathic anger when witnessing the unjust treatment of the other, and so forth. Thus, it may be more appropriate to view empathy as a category of emotional responses or as a way of responding emotionally rather than as a unitary, prototypical emotion.

## Intrapersonal and Interpersonal Consequences of Empathy

### Empathy, Prosocial Behavior, and Antisocial Behavior

One of the most widely studied consequences of empathy is its effect on prosocial behavior. The relationship between empathy for a victim and an increased tendency to help him or her has been well known for several decades. However, of late, disagreement over the cause of this relationship has garnered much research attention.

According to Batson's empathy-altruism hypothesis, empathy evokes an altruistic motive with the ultimate goal of protecting or promoting the welfare of the person for whom empathy is felt. Note that as they are used here, the term *empathy* refers to an other-oriented emotional response to the victim's suffering, and the term *altruism* refers to a motivation rather than to helping behavior per se. The claim that humans are capable of genuine altruism is somewhat controversial and, consequently, a number of egoistic (i.e., selfish) explanations for the empathy-helping relationship have been proposed. Among the more popular egoistic explanations for empathy-based helping are: a) the aversive-arousal reduction hypothesis, which claims that empathy is aversive and empathically-aroused individuals help in order to rid themselves of the unpleasant feeling; b) punishment-avoidance explanations, which claim that empathically-aroused individuals help because they wish to avoid anticipated negative social evaluations or shame and guilt for failing to help; and c) reward-seeking explanations, which claim that empathically-aroused individuals help because they desire social praise or personally-administered rewards for providing help. Although some of these egoistic explanations have received some empirical support, the empathy-altruism hypothesis is considered by many researchers to have the weight of evidence on its side.

In contrast to the large body of work on the relationship between empathy and prosocial behavior, there is relatively little research on the relationship between empathy and antisocial behavior. Most of this research has focused on deviant populations and young children, or has assessed empathy as a general personality disposition rather than as a contextual process. Evidence for a negative relationship between empathy and aggression has been reported, but it is inconsistent across populations, research paradigms, operationalizations of empathy, and different forms of antisocial behavior. Presently, the relationship between empathy

and antisocial behavior, at least among normal adult populations, remains unclear and warrants further research.

### Empathy, Accuracy, and Social Relationships

When defined as a cognitive process, empathy has been linked to conflict avoidance or management, improved communication among relationship partners, increased relationship satisfaction, and a tendency to be considerate of a partner's wants and needs. However, research suggests a number of potential barriers to accurate perceptions of what another is thinking and feeling, which can mitigate the positive effects of empathy. For example, it is common for individuals to use themselves as a basis for assessing how and why another individual will react to a given situation. Making judgments from an egocentric perspective (*viz.*, that self and other are similar) can be useful in many cases, but accuracy is seriously impaired when the empathizer and the other are actually dissimilar on situation-relevant dimensions. Accuracy is also impaired when the empathizer is currently experiencing a strong nonempathic emotion or state of need, both of which tend to be unconsciously incorporated into his or her judgment of the other's thoughts and feelings.

The role that empathy plays within the context of close relationships is even more complex. In nonthreatening contexts (e.g., discussing mundane events, planning a night out, etc.), a moderate to high level of motivation to understand accurately what the partner is thinking and feeling increases relationship satisfaction and stability. However, in relationship-threatening contexts (e.g., potential infidelity, disappointment in the empathizer's performance, etc.), individuals tend to be motivated toward empathic *inaccuracy* – that is, to intentionally distort his or her perception of what the partner is thinking and feeling. In such cases, empathic inaccuracy increases relationship satisfaction and stability. In contrast, when the motive to be empathically accurate is strong in relationship-threatening contexts, the relationship is likely to suffer. Thus, empathic accuracy is important in social relationships, but empathic inaccuracy also may prove important, at least when dealing with relationship-threatening contexts.

### Empathy, Attributions, and Attitudes

*Attributions* are cognitions regarding the cause of an individual's behavior. Among individuals raised in Western cultures, research suggests that there is a pronounced actor-observer difference when making attributions. These individuals tend to explain their own behavior as a consequence of the situation, whereas they tend to explain the behavior of others as a consequence of personality traits or dispositions, especially when the behavior is negative or otherwise results in failure. However, instructing the observer to empathize with the actor may reverse the actor-observer difference. As a consequence of empathizing with the actor, the observer makes situational attributions for the actor's behavior, just as he or she

would make situational attributions for him or herself. Thus, empathy promotes the evaluation of others in a relatively self-like (i.e., generous) manner.

Empathy also appears to increase valuing of, and attitudes toward, individuals for whom empathy is felt. Such valuing may stem in part from the reversal of the attributional biases noted above, especially in situations that involve some form of victimization. Specifically, viewing another's suffering as a result of situational factors rather than as due to disposition reduces the likelihood that derogation and blaming of the victim will occur.

The effects of empathy on valuing also have important consequences for attitudes toward members of stigmatized groups (e.g., minorities, people with HIV/AIDS, etc.) and for social causes (e.g., animal rights, the environment, etc.). Batson and colleagues proposed the following 3-step model of how empathy can be used strategically to improve attitudes toward such groups: 1) actively trying to understand what a stigmatized person is thinking and feeling will increase empathic feelings for him or her; 2) feeling empathy for him or her will increase the valuing of his or her welfare; and 3) valuing this person will generalize to valuing the stigmatized group as a whole. Initial tests of this model demonstrated that empathy improves attitudes toward a broad range of stigmatized individuals and groups (e.g., people with AIDS, homeless individuals, and convicted murderers). Subsequent research has demonstrated the power of empathy to reduce prejudice and discrimination against members of racial or ethnic minorities and homosexuals, and to improve attitudes toward protecting the natural environment and its nonhuman inhabitants.

## Implications and Future Directions

The term empathy has been used to describe a broad range of cognitive, behavioral, and emotional processes, all of which play an important role in human behavior. As noted above, empathy is potentially a powerful force not only in personal relationships, but also in an individual's interaction with social groups and with the world more generally. However, much is left to be discovered about the causes and consequences of empathy.

Perhaps the most pressing need currently is the theoretical integration of the phenomena. Much disagreement exists among researchers on how best to conceptualize empathy, which has slowed progress toward understanding its causes and consequences. Second, several important aspects of empathy have received little empirical attention. For example, research on the neurological bases of empathy has emerged only within the past few years and much remains unknown regarding the normal functioning of empathy in the brain, as well as how organic damage may effect one's capacity for empathy. Similarly, little is known about the genetic basis or evolutionary history of empathy. Given the importance of empathy in human functioning, it is remarkable that this topic has received so little empirical attention.

Also, even though research has examined the relationship between empathy and antisocial behavior, results are somewhat inconsistent from study to study. Future research may benefit from adopting a broader purview of the topic, by treating empathy as a process rather than as a general personality disposition, and by studying a representative range of antisocial behaviors rather than focusing primarily on physical or verbal retaliation. Furthermore, a broader purview may prove useful for investigating other socially-relevant consequences of empathy, such as volunteerism and empathy burnout. *Empathy burnout* refers to a process whereby empathy gives way to feelings of distress after prolonged exposure to the suffering of others (e.g., among nurses, volunteers, social workers, etc.) that causes individuals to become disengaged from those in need. Because the majority of research on empathy and prosocial behavior has focused on single-instance forms of helping, little is known about the effects of empathy in long-term care situations. Future research to address the deficits noted above and to discover additional socially-relevant consequences of empathy will be instrumental to the development of a better theoretical and applied understanding of this important and complex topic.

SEE ALSO: ► Altruism ► Close relationships ► Social skills  
► Social support

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## Empirically-Supported Interventions

James W. Lichtenberg<sup>a</sup> and Pamela L. Knox<sup>b</sup>

<sup>a</sup>University of Kansas; <sup>b</sup>Tennessee Board of Regents

*Empirically-supported interventions* are psychological interventions/treatments whose efficacy has been scientifically demonstrated through a series of research studies. Not all interventions/treatments offered by counselors and therapists have been so documented; indeed, many are not.

One of the interesting but perplexing aspects of counseling and psychotherapy is the great diversity of orientations and schools of practice that exist in the field. In the mid-1960s, one writer collected a list of over 60 different approaches to therapy and thought this to be an amazing phenomenon. By 1975, a research task force of the National Institutes of Mental Health noted over 130 different types of psychotherapy. Five years after that, there was a published account of over 200 different forms of therapy, and within six years of that publication, another

researcher referred to over 400 different therapeutic techniques. Whether the list of therapeutic approaches has grown or reduced probably depends on the person doing the counting. But in 1989, one writer, seeing a trend toward the proliferation of different forms of therapy, commented that if the then current rate of increase in therapies were to continue, at some point there would be a different form of psychotherapy for every person in the United States.

Although it is highly doubtful that the extant approaches to counseling and psychotherapy are anywhere near this number, it seems probable that the number of approaches has continued to increase. For those subscribing to the mantra that counselors and therapists should attend to *what* treatment, by *whom*, is most effective for *this* individual with *that* specific problem and under *which* set of circumstances, such a proliferation of interventions would seem desirable.

In recent years, however, there have been concerns expressed that some of professional psychology's interventions – however well-intentioned – may be ill-advised and even harmful. Even where an intervention can be demonstrated to help some clients, practitioners (counselors/clinicians) have been criticized for their inattention to or failure to take into account the damage (or potential damage) that their actions and interventions might produce. Further, several surveys of professional practices have found that many of the theories and approaches that are used within the community of practitioners are simply unsupported by empirical evidence of their effects – whether those effects be for better or worse.

As a result, there have been within the profession calls for the identification of intervention approaches that warrant a claim of being “empirically supported.” Empirically-supported interventions (also referred to as ESTs or *empirically-supported treatments*) are those that have been shown through scientific research not only to have their intended treatment effect(s) but also to rule out, or at least minimize, possible negative side effects (iatrogenic effects) that might occur and that would outweigh any benefits of the intervention.

Establishing empirical support for an intervention requires several steps. Initially, it must be demonstrated that the application of the therapy intervention is better than no intervention at all. This is referred to as demonstrating the absolute efficacy of the intervention. Next it should be demonstrated that the intervention is better than a placebo intervention. A placebo is an intervention that is identical to the treatment except that it lacks the component or aspect of the treatment that is presumed to be its “active ingredient.” Finally, it should be demonstrated the intervention is at least as effective/therapeutic as an already established treatment. In this regard, it makes little sense to develop or use an intervention that, while effective, is demonstrably less effective than an existing alternative. Within counseling and psychotherapy, the already-established treatment is either: a) a different form or approach to counseling/psychotherapy for the particular client problem or concern; or b) a medication/pill that has been shown to treat the problem effectively.

When considering the above steps, it is important to keep in mind that the absence of negative evidence (i.e., evidence that the intervention may be harmful) is not

evidence that the intervention is helpful. Empirical support for an intervention is evidence that the intervention produces the benefits claimed by its proponents.

It is generally held that decisions about the empirical support for interventions are strongest and most valuable when they are based on independently replicated studies involving groups of participants (nomothetic evidence) rather than on evidence derived from a single case (idiographic evidence) and on clinical intuition and judgment. At the same time, replicated single case studies may, in the aggregate, provide reasonable empirical support for an intervention. Group studies are strongest when they consist of randomized clinical trials (RCTs) in which participants are randomly assigned to the various treatment conditions.

Regardless of whether the empirical support for an intervention derives from group or case studies, it is important that the intervention being studied be described and operationalized clearly. This is generally accomplished by detailing the intervention procedures – what is done and in what sequence – in a treatment manual. While from a research standpoint, manualizing a treatment so that the effects of the intervention can be relatively unambiguously studied, practically has the unfortunate effect of curtailing efficacy studies of those interventions that do not easily lend themselves to manualization or behavioral operationalization.

While a part of the impetus toward identifying empirically-supported interventions has been professional psychology's need to justify the legitimacy of psychological interventions in the face of the growing influence of biological psychiatry and the tremendous rise in the use of pharmaceuticals for the treatment of psychological disorders, at the heart of the empirical support movement has been an issue of outcome accountability and "truth in advertising" with regard to the field's interventions.

Notwithstanding the benevolent motives behind the identification of empirically-supported interventions, the movement to do so has not been without detractors. As already noted, not all contemporary approaches to counseling/psychotherapy are readily manualized, with the result being that they cannot be studied and empirical support cannot be mustered easily – if at all. The result is that those interventions that can be studied are raised in public consciousness as empirically supported (and therefore legitimate practices) while those that cannot be studied necessarily lack such legitimacy. Consequential to this is that only certain approaches or interventions may be recognized as reimbursable intervention/services by health insurance providers – thereby effectively reducing the variety of interventions available to large portions of mental health care recipients. While some would argue that this is precisely the sort of consequence that should present itself to practitioners, others whose professional careers have been based on providing interventions for which outcomes are difficult to evaluate empirically, are less sanguine about the trend.

Finally, there has been dissent from a faction within the profession that the assumptions underlying the identification of ESTs are misguided. Presumed within the EST movement is the notion that certain interventions are most effective when dealing with specific problems; others are not. That is, as in medicine,

certain treatments target certain aspects of specific problems or disorders, and that it is a matching of the right intervention/treatment to the problem that results in the intervention's efficacy.

Recall the idea presented earlier that counselors and therapists should attend to determining what treatment is most effective for which specific problem, and that this perspective might logically justify the proliferation of interventions that has been seen in professional psychology. However, meta-analytic research over the past 30 years has demonstrated few significant differences in the overall treatment effectiveness of the various approaches that have been studied, and it has been argued, based on the robustness of these findings, that it is factors that are common across approaches, rather than elements/interventions that make them distinctive and thus to be targeted to particular problems, that produce the predominant benefits of therapy. This argument, however, addresses issues of mechanisms within interventions that produce benefit for clients. The issue of outcome accountability and truth in advertising – the issue of whether a particular intervention benefits clients – remains a salient and important issue.

Research establishing the empirical support for interventions has, by and large, focused on traditional orientations and approaches to counseling and psychotherapy. Of particular relevance to this volume is the empirical support for “positive psychology interventions.” Little research has been done in this regard, however, and none that would generally rise to the point of establishing a particular intervention as being empirically supported – at least with respect to the usual criteria for designating an intervention as such.

However, in 2005, Martin Seligman and several of his colleagues carefully studied the effects of five different positive psychology interventions on self-reported happiness and depression. The intended outcomes were to increase personal happiness and to decrease depressive symptoms. That is, in the parlance of ESTs, these were interventions whose ingredients specifically targeted a person's levels of happiness and of depression.

The interventions were contrasted with each other and against a placebo exercise. The interventions included: a) gratitude visit: having the participants engage in a gratitude visit in which they were to write and then deliver a letter of gratitude to someone who had been especially kind to them but who had never been properly thanked; b) three good things in life: having participants write down at the end of the day for a week three things that went well for them each day and their explanation for each good thing; c) you at your best: having participants write about a time when they were at their best and then to reflect on the personal strengths contained in the story – reviewing the story every day for a week; d) using signature strengths in a new way: having the participants take an inventory of character strengths and to then use their top five strengths in a new and different way each day for a week; and e) identifying signature strengths: doing the immediately preceding intervention while being asked only to use their top five strengths more often during the next week. The placebo condition had the participants write about their early memories every night for a week. The study, completed by participants

via the Internet, involved having the participants each randomly assigned to one of the five interventions conditions or to the placebo control condition.

Seligman and his fellow researchers found that two of the interventions – b) three good things and d) using signature strengths in a new way – increased happiness and decreased depressive symptoms for 6 months. The gratitude visit intervention produced similar changes but only for a month. The remaining two interventions – c) you at your best and e) identifying signature strengths – and the placebo condition created positive but only temporary effects.

Although an ambitious study – and certainly supportive of several positive psychology interventions – the absence of independently conducted replications of the study and its finding do not allow the interventions to rise to the level of being empirically supported. The interventions were, however, sufficiently well described to permit such replication and it is expected that this will occur. On a related note, Seligman and his colleagues noted in their article their finding of over 100 interventions claiming to increase happiness and that approximately 40 had been distilled to a form that is replicable and capable of manualization suitable for research.

The burgeoning of positive psychology as a field and the research efforts within the field can be expected to result in a toolbox of positive psychology interventions with demonstrable empirical support. In contrast to the more clinically-oriented ESTs which have as their focus overcoming or remediating problems and psychopathology, positive psychology ESTs are likely to target certain “positive” outcome variables (e.g., wisdom and knowledge, courage, humanity, justice, temperance, transcendence). Whether the benefits of such interventions derive from factors common across different forms of and approaches to therapy, or whether they derive from factors unique to the specific interventions, will remain to be examined; and any claims about intervention outcomes and theoretical explanations for those outcomes will need to be tested separately.

SEE ALSO: ► Clinical psychology ► Common factors ► National Institute of Mental Health ► Positive psychotherapy ► Seligman, Martin

## Employee Engagement

Jim Harter  
*Gallup*

*Employee engagement* is defined as the *involvement with and enthusiasm for work*. Engaged employees are both cognitively and emotionally connected to their work and workplace. Engaged employees use their discretionary effort to help their organization improve through higher productivity, greater efficiency and innovation, and more meaningful customer impact, leading to higher profitability. Disengaged employees withhold effort or withdraw from the organization, thus jeopardizing the organization’s future through higher absenteeism, higher turnover rates, more



theft or merchandise shrinkage, and more accidents on the job. The conditions that lead to employee engagement are most salient at a local level, influenced substantially by the employee's direct manager, coworkers, and their daily interactions and experiences.

The emergence of the employee engagement concept can best be understood through the history and application of job attitude research. The study of job attitudes has pervaded management science for decades, resulting in thousands of research studies, articles, and publications. A large portion of research has centered on the relationship between job satisfaction, organizational commitment, productivity, and turnover within organizations. *Job satisfaction* describes how an individual feels about his or her overall job or appraises various aspects of the job. *Organizational commitment* describes the employee's loyalty to or psychological connection to the broader organization. A meta-analytic study of the research literature conducted by Timothy Judge and colleagues, published in *Psychological Bulletin* in 2001, found substantial correlation between job satisfaction and productivity. A similar meta-analytic study of the literature conducted by Robert Tett and John Meyer, published in *Personnel Psychology* in 1993, found substantial correlation between both job satisfaction and organizational commitment with turnover intentions and actual turnover of employees. The connections between job satisfaction and organizational commitment with productivity and turnover have potentially important practical value to most organizations.

By definition, both job satisfaction and organizational commitment are broadly defined and general, which adds to our understanding of employee perceptions of themselves, their work, and their organization. However, as William Kahn described, these understandings are too general to be easily applied in practice because they exist at a distance from the day-to-day experiences of employees within their work situation. For organizations to improve job satisfaction and organizational commitment, they must first understand and act on the elements that impact employees day-to-day experiences. Kahn (1990), a professor at Boston University, described three questions organization members unconsciously ask themselves and then personally engage or disengage depending on their answers: "1) How meaningful is it for me to bring myself into this (work) performance? 2) How safe is it to do so? 3) How available am I to do so?"

Work goals are meaningful when they "feel worthwhile . . . valuable . . . feel able to give to and receive from work and others in the course of work." The individual feels safe in contributing when he "feel(s) situations are trustworthy, secure, predictable, and clear in terms of behavioral consequences . . . ongoing relationships that offer more or less support, trust, openness, flexibility, and lack of threat." The individual is available to contribute when she "feel(s) capable of driving physical, intellectual, and emotional energies into role performance" (Kahn, 1990, p. 703).

The engaged employee is fully occupied in his or her work through physical and intellectual *involvement* and emotional *enthusiasm* . . . both cognitively vigilant and emotionally connected to others or endeavors in the organization.

Meaningfulness and safety are elements of psychological involvement. Kahn's description of availability is analogous to enthusiasm via the transferring of energies into role performance.

More recently, professors at Utrecht University and Jaume I University conceptualized work engagement as "a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Bakker, & Salanova, 2006, p. 702). The Utrecht definition has convergence with prior conceptualizations of employee engagement. The engaged employee is cognitively involved through absorption in his or her work (defined by items describing immersion in work or intense concentration) and enthusiastic through vigor and dedication (defined by items describing energy, enthusiasm, pride, and anticipation).

Employee engagement is conceptually distinct from job satisfaction and organizational commitment because its foundation rests in the day-to-day experiences and discretionary efforts of employees, as opposed to more broadly measured attitudes. Measures of employee engagement should be based on items measuring the day-to-day experiences of employees in their work situation. Further, employee engagement requires dimensions of both cognitive involvement and emotional enthusiasm. Employees that are cognitively involved but not enthusiastic may have a good understanding of their job requirements and enjoy their work, but are unwilling to turn the involvement into activity that benefits the workgroup or organization. Conversely, employees that are enthusiastic but not cognitively involved may have a great deal of undirected or unfocused energy that is similarly inefficient for the workgroup or organization.

During the 1990s, scientists with Gallup independently reviewed more than two decades of its own research on workplace conditions, across 1 million employees. The basis of the research was a study of success, led by the lifetime work of Donald O. Clifton. In-depth qualitative and quantitative study of successful organizations, leaders, managers, and employees revealed 12 elements that best describe the conditions of an engaging workplace. The 12 elements are measured by the following statements:

1. I know what is expected of me at work.
2. I have the materials and equipment I need to do my work right.
3. At work, I have the opportunity to do what I do best every day.
4. In the last seven days, I have received recognition or praise for doing good work.
5. My supervisor, or someone at work, seems to care about me as a person.
6. There is someone at work who encourages my development.
7. At work, my opinions seem to count.
8. The mission or purpose of my company makes me feel my job is important.
9. My associates or fellow employees are committed to doing quality work.
10. I have a best friend at work.
11. In the last six months, someone at work has talked to me about my progress.
12. This last year, I have had opportunities at work to learn and grow.

(These 12 statements cannot be reprinted or reproduced in any manner without the written consent of Gallup. Copyright © 1993–1998, Gallup, Washington, DC. All rights reserved.)

Each of the 12 engagement statements has evidence of generalizable prediction of performance across different types of work units in different industries and countries.

Developing measurement tools that both tap into the day-to-day experiences of employees and do so in a way that they can be easily understood and applied is an important distinction between a measure of employee “engagement” and a traditional “job satisfaction” or “organizational commitment” measure.

The psychological elements characterized by the 12 statements correspond with both involvement in (cognitive vigilance) and enthusiasm (emotional connection) with work. Employees are involved in their work when they clearly know their role, have the resources they need to do their work, and are in jobs that are aligned with their abilities. Their involvement is further enhanced through timely progress discussions and learning opportunities. Employees become enthusiastic about work when they get recognition for good work, have strong positive relationships at work, and feel connected to the organization’s broader purpose.

The database on the 12 engagement items now includes responses from 10 million employees in 114 different countries. The items were selected based on cumulative performance data, collected for business units or work teams within the overall database. Six iterations of meta-analytic study have been completed by Gallup researchers. A 2002 Gallup meta-analysis included data from 7,939 business or organizational units and unit-level outcomes (customer ratings, profit, productivity, employee retention, and accidents), published in the *Journal of Applied Psychology*. The current database now includes 23,910 independent business or organizational units (681,799 independent employee responses) in 125 organizations. The database includes 19 business or operating unit types across 37 industries. In addition to the 5 outcomes listed above, the more recent database includes unit-level data on absenteeism and shrinkage.

The 2006 meta-analysis reached the following practical conclusions:

1. Engaged employees have 27% less absenteeism than actively disengaged employees.
2. Comparing top- to bottom-quartile engagement business units resulted in median percentage differences of:
  - 31% in turnover for high turnover companies (those with 60% or higher annualized turnover);
  - 51% in turnover for low turnover companies (those with 40% or lower annualized turnover);
  - 12% in customer loyalty/engagement;
  - 62% in safety incidents;
  - 51% in shrinkage;
  - 18% in productivity; and

- 12% in profitability (Harter, Schmidt, Killham, & Asplund, 2006, p. 35).

In addition to empirical linkages between measures of employee engagement and various performance outcomes, the research on engagement at work has recently been extended to understanding the human nature behind each of the key engagement elements, and *how* great managers act on each element to create a more engaging workplace. “In companies that are better places to work, millions of small actions – statistically insignificant in isolation – created higher customer scores, reduced absenteeism, led to fewer accidents, boosted productivity, and increased creativity, and accumulated to make a more profitable enterprise” (Wagner & Harter, 2006, introduction p. xvi).

In 2006, Robert Vance, in conjunction with the Society for Human Resource Management (SHRM) foundation, published effective practice guidelines on Employee Engagement and Commitment, listing definitions of employee engagement and suggestions for increasing employee engagement and commitment in organizations. Use of the term *employee engagement* became popular in 1999, following publication of Gallup’s management discoveries in the book *First, Break All the Rules*. The trend continued as various consulting organizations adopted the employee engagement terminology. It is clear from Vance’s review that the definition of employee engagement has varied significantly, and in many cases diverts from the definition established in the academic literature. The most common point of departure is in the, often-times, relabeling of items measuring “organizational commitment” as “employee engagement,” or in some cases labeling any collection of attitudinal items asked of employees as “employee engagement.” In part, this speaks to the fact that the label “employee engagement” resonates with the management of many organizations, possibly because it conveys a different level of involvement and emotional connection to work than does the traditional “job satisfaction” construct label. There are several research studies and papers in process that will help to clarify the statistical convergent and discriminant validity of job satisfaction, organizational commitment, and employee engagement. The conceptualization of employee engagement presented here is based on an accumulation of the scholarly peer-reviewed sources available at the time of publication.

SEE ALSO: ► Positive organizational behavior ► Strengths-based organization

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## Endorphins

Thais Piassa Rogatko

*University of Maryland, Baltimore County*

*Endorphins* are neurotransmitters found in the brain that bind to opiate receptors and produce a feeling of pain relief also known as *analgesia*. The word *endorphin* is derived from the words *endogenous* (meaning from within the body) and *morphine* (a powerful pain fighting drug). The term *endorphin* refers to all the opioid peptides. There are currently more than 20 types of *endorphins* that have been discovered in humans.

*Endorphins* were first discovered in 1976 by two independent groups of scientists. John Hughes and Hans Kosterlitz of Scotland isolated what they called *enkephalins* from the brain of a pig. Around the same time, Rabi Simantov and Solomon Snyder of the United States found in the calf brain what Eric Simon (who independently discovered opioid receptors in the brain) later termed *endorphins*.

## Functions

In addition to regulating pain, *endorphins* are related to feelings of euphoria, appetite modulation, memory, body temperature regulation, and the release of sex hormones. The release of *endorphins* has also been shown to lower blood pressure. Additionally, *endorphins* are known to enhance the immune system and retard the aging process by removing superoxide (a free radical) from the body. Several painkilling drugs, such as morphine and codeine, act like *endorphins* by activating opiate receptors.

*Endorphins* are released by exposure to light, and in response to pain, stress, sexual activity and exercise. Acupuncture may also stimulate the release of *endorphins*. Intense levels of exercise lead to an increased production and release of *endorphins*, resulting in a sense of euphoria that has been popularly labeled a “runner’s high.” Research has found that levels of *endorphins* in the blood are higher in people who have recently exercised, but return to a normal level within thirty minutes. *Endorphins* may be responsible for exercise addiction which has been reported by some frequent exercisers. They may also contribute to the decreased sensitivity to pain reported by athletes who are injured while performing. *Endorphins* may also be related to the success in using exercise to treat people with mild depression.

## Molecular Biology

There are at least three different types of endorphins. The best-known endorphins are alpha ( $\alpha$ ), beta ( $\beta$ ), and gamma ( $\gamma$ ) endorphins, of which beta-endorphins appear to be the most implicated in pain relief. Beta-endorphins are found almost entirely in the pituitary gland. The amino acid residue sequence of beta-endorphins is: Tyr-Gly-Gly-Phe-Met-Thr-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr-Leu-Phe-Lys-Asn-Ala-Ile-Ile-Lys-Asn-Ala-Tyr-Lys-Lys-Gly-GluOH.

In addition to endorphins, other opioid peptides exist: the enkephalins and the *dynorphins*. Enkephalins produce an analgesic effect, but it is weaker and of shorter duration than that of endorphins. The term enkephalin refers mainly to two peptides, [Met]-enkephalin and [Leu]-enkephalin, which are both products of the proenkephalin gene. The amino acid sequence of [Met]-enkephalin is Tyr-Gly-Gly-Phe-Met, which is a small segment of the beta-endorphin sequence. The sequence of [Leu]-enkephalin has Leu in place of Met. It is hypothesized that enkephalins may simply be byproducts of incompletely consumed endorphins. Dynorphin is the product of a third opioid gene, called *prodynorphin*.

Enkephalins and dynorphins are located throughout the nervous system. The enkephalins are located unevenly throughout the brain, and are very concentrated in the basal ganglia, the thalamus, and the periaqueductal gray matter. Additionally, there are high concentrations of enkephalins in the adrenal medulla, where they are co-released with norepinephrine in response to stress and other stimuli.

## Mechanism of Action

Beta-endorphins are released into the blood by the pituitary gland and into the spinal cord and brain by hypothalamic neurons. The beta-endorphin that is released into the blood is prohibited from entering the brain in large quantities because of the blood-brain barrier. The physiological importance of the beta-endorphin that can be measured in the blood is not yet clear. What is known is that beta-endorphin is a cleavage product of proopiomelanocortin (POMC) which is the precursor hormone for adrenocorticotrophic hormone (ACTH), a major pituitary stress hormone. Stimuli that release ACTH, which in turn induces the adrenal gland to release steroids, also co-release beta-endorphin at the same time. Therefore, beta-endorphin is released into the bloodstream with ACTH.

The mechanism by which endorphins decrease pain is by preventing the release of the inhibitory neurotransmitter GABA (gamma-aminobutyric acid), which then causes more dopamine to be released. High levels of dopamine in the brain lead to experiencing a feeling of euphoria. By hijacking this process, exogenous opioids (such as morphine) cause inappropriate dopamine release, which leads to feelings of pleasure and can cause addiction. Future research about endorphins

and their receptors in the brain has implications for the treatment of opiate addictions as well as chronic pain disorders.

SEE ALSO: ► Aerobic activity ► Dopamine ► Neurobiology

## Enjoyment

Jan C. Kapsner

*University of Kansas*

*Enjoyment* is thought of as engagement in a challenging experience that either includes or results in a positive affective state. Enjoyment is often considered synonymous with pleasure in much existing literature and research, but Csikszentmihalyi provides an important distinction between the two. He purports that pleasure is the feeling of contentment achieved when biological or social needs have been met, whereas enjoyment is characterized by forward movement that accomplishes something novel or challenging, resulting in a growth experience. Borrowing from Deci and Ryan's work on intrinsic versus extrinsic motivation, this optimal growth experience becomes an enjoyable activity that is done regardless of future benefits, because doing it is in itself a reward.

Wankel, in his work in sport and exercise psychology, takes a more inclusive approach, defining enjoyment as a positive affective state that may result from the meeting of certain needs, or a more growth oriented cognitive perception of having successfully achieved something difficult. Affect and cognition, Wankel asserts, can be distinguished as separate entities even though they are both generally present in a situation that results in enjoyment. Kimiecik and Harris, also working in sport and exercise psychology, take a narrower view, proposing that enjoyment cannot be both an affect and a cognition. They suggest that the biological component of Wankel's definition is associated more with pleasure than enjoyment. Like Csikszentmihalyi, they believe that the positive affective response is a consequence of an enjoyable event, or the product, whereas enjoyment is the actual process or optimal experience. Kimiecik and Harris define enjoyment as "an optimal psychological state (i.e., flow) that leads to performing an activity primarily for its own sake and is associated with positive feeling states" (1996, p. 256).

It still remains unclear whether enjoyment is an affect, an experience, a cognitive perception, or some combination of the three. Wankel put it eloquently when he wrote, "Is the positive affect the essence of enjoyment, or do the various 'cognitive components comprising flow' constitute enjoyment, and they result in positive affect?" (1997, p. 106). Although it may be a simple argument over semantics, developing a widely accepted conceptual definition of enjoyment could be helpful for measurement purposes in research. Among measures used to assess enjoyment is Endicott, Nee, Harrison, and Blumenthal's Quality of Life Enjoyment

and Satisfaction Questionnaire (Q-LES-Q) which is often used to assess quality of life. Enjoyment is a key construct in many areas of research, such as exercise, motivation, media, and well-being, and a universal definition may aid in bridging the work done in various areas.

SEE ALSO: ► Aesthetic appreciation ► Flow ► Joy ► Pleasure  
► Positive emotions

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## Entrepreneurial Behavior

Patricia Jardim de Palma,<sup>a</sup> Miguel Pina e Cunha<sup>b</sup> and  
Miguel Pereira Lopes<sup>a</sup>

<sup>a</sup>*Instituto Superior de Psicologia Aplicada, Lisbon, Portugal;* <sup>b</sup>*Universidade Nova de Lisboa, Lisbon, Portugal*

Entrepreneurship is considered a major engine of economic growth and job creation: a positive force of social innovation and change. This may partly explain why entrepreneurial behavior receives so much attention in the literature. *Entrepreneurial behavior* refers to the discovery and exploitation of a new business opportunity with the purpose of profit and growth. Several benefits for individuals, groups and organizations can be associated with entrepreneurial behavior. Several studies have shown that individuals who discover and decide to develop a new business opportunity are more self-confident and satisfied with their work and their lives. This is probably due to the fact that they perceive high levels of autonomy, flexibility and interest in the work they are doing. Employees working on new ventures are also more satisfied with their work, as these types of organizations tend to be more innovative and dynamic than mature organizations and make use of more competitive human resource management practices.

## Origins of Entrepreneurial Behavior

To achieve a better understanding of entrepreneurial behavior, scholars have relied on the study of the entrepreneur him/herself. Entrepreneurs are at the heart



of entrepreneurial activity, as they are those who recognize opportunities and choose to exploit them. The study of the entrepreneur has emerged based on the psychological traits that distinguish an entrepreneur from a nonentrepreneur. Over the last four decades, a diversity of traits has been identified as characteristic of entrepreneurs, such as need for achievement, risk taking, innovativeness and autonomy. Given that a single and consistent “psychological profile” of the entrepreneur has not been achieved, the use of the trait approach is of limited value to explain how entrepreneurial behavior emerges and develops over time.

## **A New Wave in the Study of the Entrepreneurial Behavior**

During the 1990s, a behavioral approach started to emerge. The behavioral approach represents a major change in the study of the entrepreneur, as it is centered on what the entrepreneur really does instead of focusing on who the entrepreneur is. When compared with the trait approach, the behavioral perspective presents more advantages to both entrepreneurs and the organization. First, behaviors are, by definition, explicit, observable and demonstrable. By witnessing the entrepreneurial behavior, we are able to measure it in a relatively reliable and objective way. The distinction among different levels of entrepreneurial behavior therefore becomes possible.

Second, because it is measurable, entrepreneurial behavior is manageable. Entrepreneurial behavior is susceptible to change and development and not as rigid and difficult to change as the trait approach had initially conceived. This is particularly important when statistics show that new ventures have a high propensity to fail, a phenomenon known as *liability of newness*. Thus promoting growth-oriented firms that are able to create value for entrepreneurs, employees and society, is equally important to the creation of new ventures. Under a behavioral approach, entrepreneurs can be developed as their new ventures are growing.

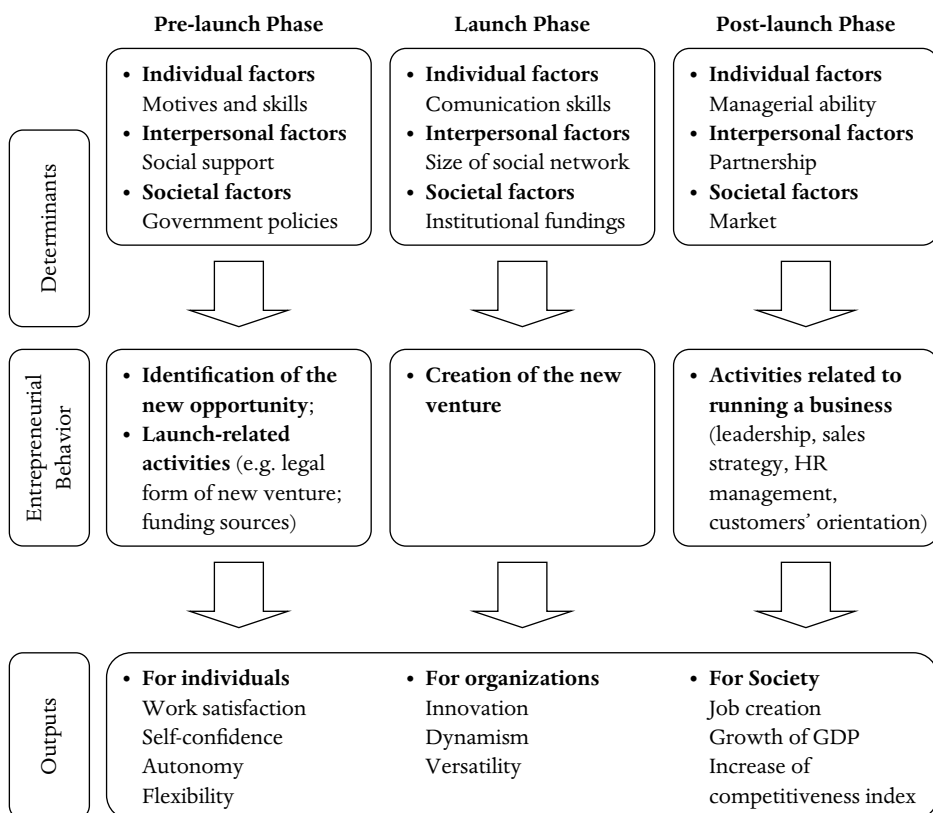
The behavioral approach conceives entrepreneurial behavior as an interactional process, which is the product of individual, organizational and environmental influences. Within this framing, more holistic and integrative models have come out, trying to explain entrepreneurial behavior. In a study using technology-based firms, Eisenhardt and Schoonhoven concluded that both the founding team and the stage of the market (emergent, growing or mature) played a significant role in the development of new firms. Thus, it is clear that context is a major determinant of entrepreneurial behavior.

The behavioral approach represents a new wave in the study of entrepreneurship. Instead of focusing on entrepreneurs alone, the behavioral approach considers a broader set of factors as determinants of entrepreneurship. Given that the creation of a new venture is a complex and multiphase process, we can identify three types of entrepreneurial behavior, with different determinants.

## Determinants of Entrepreneurial Behavior

The creation of a new venture involves three distinct stages: pre-launch; start-up, the 12 to 24 month period immediately following launch; and post-launch, which encompasses further development. Accordingly to these stages, we can find three entrepreneurial behaviors: 1) the identification of a new business opportunity, 2) the establishment of a new venture to exploit that opportunity, and 3) the management of the new venture to make it persist and grow over time as shown in Figure 1.

In the pre-launch phase, individuals are expected to search for new opportunities. This stage ends when the entrepreneur decides to pursue an opportunity and seeks the relevant information related to launching the new venture. Entrepreneurial behavior during this phase is influenced by how the individual is motivated to be independent and has the skills necessary to produce a competitive product or service. Support from family as well as state or private funding are important predictors of the decision to create a new business.



**Figure 1** Model of the Entrepreneurial Behavior during the Launch of a New Venture.  
Source: Based on Baron (2002) and Herron and Sapienza (1992)

After gathering all the information needed, individuals create the new venture. During the start-up phase, entrepreneurs are required to communicate their vision to future employees and potential customers. Having a rich social network may be important to capture both funding and new customers that ensure the survival of the new venture. After the start-up phase, entrepreneurs need to implement all the activities required to run a business in order to make their new venture flourish. Activities related to running a business are influenced by the managerial ability of the entrepreneur to define the most appropriate sales strategies or to implement innovative human resources (HR) practices that retain the best employees.

It is thus clear that creating and nurturing a new venture requires positive entrepreneurial behaviors, such as proactivity, creativity and engagement. We now discuss potential areas of synergy between entrepreneurial behavior and positive psychology that can benefit both fields of research.

## **Positive Psychology Opens Up New Research Avenues for Entrepreneurial Behavior**

Given the high propensity of new ventures to fail, research on entrepreneurial behavior needs to explore the factors that make these organizations flourish. Focusing on human goodness and excellence, positive psychology may advance this line of research. This can be achieved by highlighting those traits that produce pleasure and gratification that have not yet received enough attention in the field of entrepreneurial behavior. In a pioneering study, Jensen and Luthans have reported a positive relationship between entrepreneurs' positive psychological capital and their self-perception of authentic leadership. More studies are necessary to identify other positive strengths that explain how positive climates may be crafted, contributing to the growth of new ventures.

The definition of *entrepreneurial success* is not yet a consensual subject in the scientific community. Some researchers consider successful entrepreneurship as the creation of a new venture, whereas others argue that success is only present when the entrepreneur is able to build a firm that grows over time. Positive psychology may contribute to facilitate agreement by emphasizing the benefits of a positive focus. Several scholars have already demonstrated the positive impact that positive strengths, such as hope, optimism or positive emotions have on clinical, educational and organizational contexts. The literature on entrepreneurship reveals the scientific community's interest in the impact of this process as a positive social force. The efforts of entrepreneurs often constitute creative experiences, as they are able to create something out of nothing. Looking at the positive side of entrepreneurship may introduce more clarity into how entrepreneurial behavior can be conceptualized and studied.

Despite the emphasis on the entrepreneurs' behaviors, little has been done to develop this orientation over time. Positive psychology scholars have devoted great

attention to the development of positive strengths. Either at a micro- or a macro-level, interventions have been designed to improve the personal qualities of individuals and their contexts. The field of entrepreneurial behavior may take advantage from such an approach, by proposing specific interventions for the pre-launch, launch and post-launch phases.

## **Entrepreneurial Behavior Brings in New Directions for Positive Psychology**

Positive psychology elects, as a major topic of investigation, the study of positive individual traits that are related to the character, talents, interests and values. Because psychological traits are relatively difficult to change, the literature on entrepreneurial behavior may advance a relevant contribution by introducing a behavioral approach on positive psychology. Considering individual behaviors as important as traits, psychologists may focus on the activities performed by individuals, which are explicit and measurable. Interventions can be used to make more positive and virtuous behaviors flourish in a range of institutions, such as families, schools, business and communities.

Research on positive psychology has mainly centered on how positive experiences and traits affect individual well-being. Little is known about how these positive phenomena emerge and develop over time. Literature on entrepreneurial behavior may help to shed light on these processes, by providing an empirical arena in which to test the construction and development of positive processes. After launch, the new venture starts to exist as an autonomous entity, forming an identity and developing distinctive characteristics. New ventures in the start-up phase can thus be considered the most appropriate contexts to study how positive experiences and traits emerge and spread throughout the organization as it grows.

Theorists are devoting much energy to establish positive psychology as a mature research domain. However, more can be done to institutionalize the field. The literature on entrepreneurship reveals how concerned the scientific community is with the impact of entrepreneurial behavior in society. Several scholars have found evidence for the impact of the entrepreneurial activity on the growth of gross domestic product (GDP), per capita income and competitiveness index. This growing recognition of the importance of the entrepreneurial activity has led several governments to invest in policies that promote entrepreneurship in their countries. This concern with the impact on society is hardly reflected in the field of positive psychology. Scholars are especially devoted to highlighting the factors that enable thriving effects on individuals, groups and organizations. Entrepreneurial behavior may, therefore, constitute a relevant addition to the study and application of positive psychology.

SEE ALSO: ► Adaptability ► Career development ► Empathy  
► Innovation ► Penn Resiliency Program

## Environmental Resources

Jeana L. Magyar-Moe

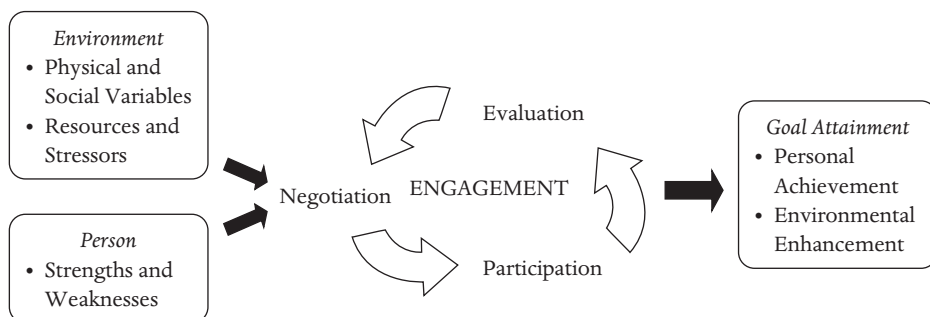
*University of Wisconsin – Stevens Point*

*Environmental resources* are aspects of the environment that promote healthy functioning and growth of individuals. Assessment of such resources is a vital component of the four-front approach to psychological assessment and can provide valuable information to practitioners throughout the conceptualization, diagnostic, and treatment planning processes. Indeed, capitalizing on environmental resources is useful in a therapeutic context, as well as educational, vocational, social, and familial arenas. To date, however, there is a dearth of scholarship focused on the identification and empirical examination of environmental resources.

### Models of Environmental Resource Assessment

Despite the fact that psychologists, especially behaviorists, largely agree that behavior can be shaped by the environment, research seems to stop at a description of the principles by which the environment can shape behavior, rather than continuing on to identify the specific environmental variables that do the shaping. The fact that environmental contexts are difficult to operationally define is one factor that contributes to the research problem. Additionally, researchers who subscribe to an individualistic framework, in which the individual is viewed as being the responsible agent of behaviors and behavior change, may also contribute to the lack of environmental research. Finally, those who perceive that assessing the environment is not useful due to the view that the environment is not within an individual's control or is too difficult to change are also likely turned off by this research endeavor.

Perusal of the available research on the assessment of environmental resources reveals a variety of definitions, approaches, and foci to the conceptualization and measurement of the environment. For example, environmental resources are defined by some as those aspects of the *objective outer world* (i.e., physical and social factors) of the individual that influence his or her well-being, whereas others place the focus of measurement on those factors that are part of the individual's *perceived subjective world* (i.e., the psychological meaning of the person's environment). A sociological model of environmental assessment was developed by Moos in which the environment is conceptualized as consisting of continuous life stressors and social resources in various life arenas including home, school, and work that dynamically interact with the personal factors of individuals (e.g., demographic characteristics, cognitive abilities, self-esteem, values, cultural beliefs). In addition, this model includes three dimensions of the environment, namely, the *relationship dimension* (the extent to which people in a given setting are supportive of and comfortable with each other), the *personal growth* or *goal-orientation dimension* (the underlying goals



**Figure 2** The Engagement Model of Person-Environment Interaction.

Source: Neufeld et al. (2006)

toward which an environment is oriented and how this corresponds to the personal development and enhancement of the individual), and the *system maintenance and change dimension* (the extent to which a setting is structured, with clear expectations, yet open to change). The focus of all three categories is on the evaluation of *what works well* for a given person within a given environmental setting.

## The Engagement Model of Person-Environment Interaction

The engagement model of person-environment interaction (see Figure 2) was specifically designed as a framework for the assessment of environmental resources. In this model, the environment is conceptualized as consisting of both physical and social variables with both the behavioral setting and the people within it making unique contributions to the process of the person-environment interaction. Engagement consists of three components – *negotiation* (i.e., the process by which a person and the environment make adjustments to accommodate each other), *participation* (i.e., the degree of positive interactions between a person and an environment in the psychological, physical, and emotional domains), and *evaluation* (i.e., a person's thoughts and feelings about the goodness of fit between self and environment) – which are the active ingredients that lead to positive outcomes in any person-environment setting. The dynamic interplay between a person and his or her setting is at the heart of this model, thus superseding the individual examination of either the individual or the context in which he or she exists.

## Methods for Assessing Environmental Resources

Practitioners can begin the process of assessing environmental resources by utilizing the four-front assessment approach when conceptualizing people and their

environments. Practitioners who work from this assessment model ask four questions as follows: (1) What deficiencies does the person contribute to his or her problems? (2) What strengths does the person bring to deal effectively with his or her life? (3) What environmental factors serve as impediments to healthy functioning? (4) *What environmental resources accentuate positive functioning?*

In addition to exploring these questions, practitioners can make a small alteration when completing the five axis assessment system of the *Diagnostic and Statistical Manual of Mental Disorders – IV – TR*. Currently, clinicians are required to list psychosocial and environmental *problems* on Axis IV but there is no requirement to report psychosocial and environmental *resources*. Thus, practitioners who are interested in assessing environmental resources can take the initiative to list the environmental resources alongside the problems on axis IV in order to facilitate the overall assessment and understanding of clients with whom they work.

Finally, formal measures of resources in environmental contexts are also available for practitioner utilization. Such measures include those related to the assessment of home and family environments (e.g., Family Adaptability and Cohesion Evaluation Scales II, Family Functioning Style Scale, and Home Observation for Measurement of the Environment), work environments (i.e., Gallup StrengthsFinder, Organization Climate Index), and school environments (e.g., Code for Instructional Structure and Student Academic Response; The Instructional Environment Scale II).

SEE ALSO: ► *Diagnostic and Statistical Manual* ► Four-front assessment approach

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## Epigenetics

James P. Curley<sup>a</sup> and Eric B. Keverne<sup>b</sup>

<sup>a</sup>*Columbia University*; <sup>b</sup>*University of Cambridge*

In the last decade there has been an exponential increase in the study of *epigenetics*. The term has been in common usage since 1942 when the British biologist Conrad Waddington (1905–1975) defined it as a branch of biology that studies the causal interactions between genes and their products, which ultimately bring the phenotype into being. More recently, the term has gained varied additional meanings dependent upon whether it is used in developmental, molecular

or evolutionary biology. The underlying concept in its uses across these disciplines is that biological processes may be described as epigenetic if they are not the result of direct changes to the sequence of DNA, but to changes in how genes are expressed (the Greek prefix *epi* meaning “over” or “above”). A good example is cellular differentiation. Every cell in an organism contains the same genetic material, but different cell lines become specialized as development proceeds, becoming part of the liver, skin, heart etc. This is achieved through the epigenetic silencing or activation of specific genes within each cell line, with these modifications inherited by daughter cells. Indeed, another common usage of epigenetic is the inheritance of characteristics of an individual from one generation to the next through nongenetic mechanisms. There are two broad categories of epigenetic processes: 1) those altering characteristics of an individual across various stages of development; and 2) heritable changes to germ-line gene expression that are not directly attributable to changes in DNA sequence.

Epigenetic changes in gene expression occur through numerous covalent and noncovalent modifications to the structure of chromatin (which contains DNA and its supporting proteins) and thus alter the accessibility of the transcriptional machinery to genes. Within each cell nucleus, DNA is located within nucleosomes that are comprised of 147 nucleotide base-pairs that are wrapped around an octamer of histone proteins (two each of H2A, H2B, H3 and H4 proteins). A fifth histone protein, H1, acts as a link between individual nucleosomes with approximately 80 nucleotide base pairs being located outside each nucleosome. Chromatin may be tightly packed and restrictive to the accessibility of the enzyme RNA polymerase II to DNA thereby repressing gene transcription. Conversely, the DNA within chromatin may be loosely bound to histone proteins thereby facilitating the access of transcriptional enzymes and other proteins to the DNA hence increasing gene expression. The transition between these two states may be induced through various different covalent and noncovalent modifications to the individual histone proteins or to the DNA itself (DNA methylation and histone acetylation are two of the most common of these types). These epigenetic changes all lead to variations in the structure of chromatin rather than variations to the DNA sequence, and are typically stable over the long-term, though new research suggests that some may also be dynamic and short-term in nature.

Recent interest in epigenetics has increased as these molecular mechanisms may act as the mediators through which the “environment” and the “genome” interact, as it has been shown that changes in chromatin structure can be induced during development through environmental experiences. For instance, studies in rodents suggest that the levels of mother–infant interaction experienced by offspring early in development can have stable long-term effects on gene expression and behavior; altering stress responsivity, cognition and social/reproductive behaviour. Increased response to stress in response to low levels of maternal care is associated with the decreased expression of glucocorticoid receptors (GR) in the hippocampus related to a decrease in H3 acetylation and increase in DNA methylation of the GR promoter. Moreover, evidence from human, primate and rodent



studies suggest that individual differences in levels of mother–infant interaction can be transmitted across generations. Cross-fostering, a technique used to determine whether a characteristic is dependent on the inheritance of DNA sequences, confirms that this transmission is nongenomic and in rodents is dependent on epigenetic modifications to estrogen receptor alpha (ER $\alpha$ ). These studies demonstrate clearly that early life experiences can indeed have long-lasting profound effects upon adult phenotype, and that these may be mediated via epigenetic modifications of gene promoters in a brain region specific manner. Similar epigenetic effects on other gene promoter regions have been demonstrated in response to other social experiences, drugs, diets and changes in environmental conditions. More recently, investigators are starting to establish that some of these epigenetic changes may occur in cells in the germ line, meaning that environmental effects may not only influence the development of individual's characteristics in one generation but for generations to come.

Thus, these findings have important broad implications for the fields of psychology and psychiatry in providing a route through which the genotype and environment interact during development to create individual differences in brain development and behavior as well as risk and resilience to health and disease.

SEE ALSO: ► Developmental psychology ► Evolutionary psychology

## Ethnic Identity

Jean S. Phinney

*California State University, Los Angeles*

*Ethnic identity* is a dynamic, multidimensional construct that refers to one's identity, or sense of self, as a member of an ethnic group. Ethnic identity is not a fixed categorization but rather a fluid and dynamic understanding of self and group that changes with age, time, and context. An ethnic identity is constructed and modified as people become aware of their own and other ethnic groups and of the differences among them and attempt to understand the meaning of their own ethnicity within a larger setting. Ethnic identity makes an important contribution to well-being, particularly for those who are members of minority or lower status groups.

Early research on ethnicity was carried out largely by sociologists, but the topic is currently widely studied by psychologists, anthropologists, and educators, among others. The study of ethnic identity has been complicated by the lack of a consistent definition of the concept and by the use of differing measures in research. Nevertheless, a consensus has emerged that recognizes ethnic identity as more than the label that individuals use to describe themselves in ethnic terms. Broadly, ethnic identity encompasses a sense of belonging to an ethnic group, feelings and attitudes about one's group membership, and knowledge about the group. These components

take shape and change over the course of development, in a process beginning in childhood and continuing throughout adulthood. In addition to developmental factors, ethnic identity formation is influenced by aspects of both the local setting and the larger context of the society or nation.

Children's knowledge and feelings about their ethnicity are influenced from an early age by their family and community. When families provide positive images of their ethnic group, children's early feelings about their group are likely to be positive. A strong and vital ethnic community supplies a context in which children can form a positive sense of their group. Positive feelings about one's group contribute to good feelings about oneself. However, ethnic minority children are also influenced by messages from other groups and the larger society. Negative messages about one's group may become internalized when an ethnic group is disparaged by others or is subject to stereotypes and discrimination. Children may then hold conflicting or negative feelings about their ethnicity and about themselves. They may express the desire to belong to another group, for example, preferring the dominant culture over their own and trying to imitate it.

Positive and negative feelings about one's ethnic group membership are typically salient during adolescence and young adulthood, when young people are exploring and establishing their sense of identity. Following Erik Erikson's theory of identity formation, models of ethnic identity formation suggest that developing a mature identity involves two processes, exploration and commitment. *Exploration* refers to the search for a meaningful ethnic identity and involves learning about the history, customs, accomplishments, and current status of one's group. *Commitment* refers to a clear sense of belonging to one's group. The optimal outcome of the ethnic identity formation process is the achievement of a secure and confident sense of one's ethnicity based on an exploration of the meaning and implications of one's group membership and a commitment to the group. An achieved ethnic identity results from an understanding of the culture, history, and accomplishments of one's group, as well as the difficulties that it has faced. This mature sense of self as an ethnic group member includes positive feelings about one's group and is a source of personal strength and positive self-evaluation. Research has consistently documented a relationship between a strong ethnic identity and psychological well-being, including high self-esteem, a sense of mastery, optimism, and low levels of depression. A strong, secure ethnic identity is also associated with positive attitudes towards other ethnic groups. Conversely, individuals who are not secure or comfortable with their ethnicity may experience low self-esteem, anxiety, and negative or ambivalent inter-group attitudes. Ethnic identity is typically renegotiated throughout life in response to individual, contextual, and historical changes and varies in the short-term over differing settings. Ethnic identity varies in strength across ethnic groups and is consistently stronger in groups that are of lower status in society, such as African Americans in the United States. Maintaining a positive sense of one's ethnicity in the face of temporal or contextual change is an important component of well-being for most minority group members.

As minority group members develop a sense of their own group membership, they also face issues regarding their national identity, that is, their sense of belonging to the larger society. The way in which these two identities interact is an important factor in the well-being of ethnic group members. Most minority group members report identifying with both their ethnic community and the larger society, but some remain within their ethnic communities and have little contact outside of it, or become assimilated into the larger society. The most adaptive outcomes for minority individuals in multicultural societies result from having a bicultural identity and being comfortable both in one's own ethnic culture and also in the culture of the larger society.

Multiethnic individuals, that is, those who have parents from two or more different ethnic groups, may have a more difficult task of achieving a group identity than do monoethnic or monoracial youth. These individuals must negotiate between the two (or more) cultures of their parents and incorporate elements of different cultures into their identity. An environment in which there are other multi-ethnic people with whom they can explore their experience can help multi-ethnic young people achieve a secure ethnic identity.

Research on ethnic identity remains somewhat fragmented because of the variety of definitions and measures that have been used. A measurement model aimed at clarifying the construct of ethnic identity for research has been proposed by Phinney and Ong in 2007. Future research is needed to explore ethnic identity across a wider range of ethnic groups, settings, and ages, and to examine its relation to other factors such as attitudes, beliefs, and behaviors.

SEE ALSO: ► Culture ► Ethnicity

## Ethnicity

Sage Rose<sup>a</sup> and Cecil Robinson<sup>b</sup>

<sup>a</sup>*Hofstra University*; <sup>b</sup>*University of Alabama*

*Ethnicity* can be generally defined as differentiating norms, values, beliefs, cultural symbols and practices among groups of people. In recent years, the term ethnicity has grown in importance as globalization highlights an ever increasing population of multiethnic heritages that reflect continuous changes in the composition of society. Because of these changes, psychologists, other social service practitioners and researchers (such as educators, social workers and counselors), and policy-makers are called to understand how ethnic differences shape research and practice within positive psychology. This need is emphasized by the American Psychological Association's establishment of six specific multicultural guidelines which encourage psychologists to more effectively define and promote optimal well-being of individuals from diverse cultural groups. These guidelines were developed to create awareness of personal attitudes and beliefs, and worldviews

of ethnically and racially different groups and individuals. Meeting these multicultural guidelines will benefit research through the improvement of research design, assessment, analysis, and interpretation and the practical outcomes influenced by research.

To define ethnicity, it is important to understand its history in relationship to the concept of *race*. Although the meanings of race and ethnicity are not synonymous, each is often used interchangeably when referring to people of different groups. By contrast, the conceptual development of the term ethnicity was an attempt to escape the racist connotations that accompany the concept of race. Race has been used to categorize human populations through physical characterization. Most social scientists view race predominantly as a social construct because only 2% of our genes are responsible for visible differences like skin color. Due to the problematic nature of race, research has consistently pointed to the importance of cultural differences such as income, education, and occupation rather than focus on biological differences.

The concept of ethnicity does not rely solely on biological differences, but incorporates nationality or place of origin and also includes religion, beliefs, and values. Ethnicity is a relational concept describing self-identified groups based on beliefs about shared culture or history. Because of the relational, cultural and historical nature of ethnicity, persons may be of the same ethnicity but reflect different racial backgrounds. White and Black persons growing up in South Africa may both be ethnically identified as South African. Similarly, individuals may be of the same racial group but have differing ethnic qualities such as language, style of dress, or religion. Consider two White persons, one from England and the other from France. Although each is White and share similarities, there are many cultural differences (language, religion, etc.) and each has a different history. As such one would be ethnically identified as English and the other French. The same is true of the racial categories of Latin or Latin-American persons; although considered to be the same racially, there are many ethnic differences among Italians, Spaniards, Puerto Ricans, Nicaraguans, Mexicans and other Latin and Latin-American ethnic groups.

While the concept of ethnicity attempts to address the problematic aspects of categorizing people, it is not without critique and may also be considered a contested term. White, Anglo-Saxon, or Caucasians often use ethnicity to describe *other* people that are different from them, typically in terms of skin color. That is, being white is typically viewed as a universal (or having no ethnicity) that does not require categorization of ethnicity. However, people considered white do reflect an ethnic group and should not be taken for granted as the norm.

When persons classified as white are considered the norm there is the tendency to view individuals from other ethnicities as disadvantaged, or at a deficit if their cultural practices differ from this norm. This is known as the *deficit model approach*. This is problematic because deficit models give little importance to the strengths of differing ethnic groups. Although the deficit model focuses on the environmental circumstances of prejudice and inequities acting against ethnically

diverse groups, it continues to portray minority groups as inferior with negative coping strategies. In contrast, a *difference model approach* capitalizes on the differing strengths of diverse individuals and promotes the importance of difference as aspects of optimal functioning and adaptation. Constructs that may be beneficial for some populations may not be universally beneficial across all ethnic groups. For example, research has found that perceptions of control and pessimism among Asian populations have different effects on psychological outcomes that are not necessarily negative. Difference models also create opportunities to research and develop clinical, educational and social interventions that build on the cultural strengths of various ethnic groups and promote well-being. As another example, whereas underachieving inner-city African American students are typically viewed as having deficits – limited language and academic abilities – difference models have utilized African American English used by these students as a cultural tool and strength to promote rich understanding of complex literary texts.

Although positive psychology has highlighted the importance of ethnic diversity in research and practice, much is yet to be understood. Research about hope has indicated no ethnic differences among agency and pathways perceptions. Research about cross-cultural differences in optimism have been inconclusive. Regard for one's ethnic group has been shown to moderate associations between normative stressful demands and happiness. Diminished levels of life satisfaction and happiness were significantly correlated with consistent worry about race relations among young adults. There have also been significant group differences in subjective well-being for Black and White populations, indicating that cross-ethnic comparisons should be performed with caution. To develop constructs of the good life that are ethnically sensitive, conceptualizations of positive functioning should be explored through motivation, action, goals, context, and social time. It is important that each of these dimensions, and the very construct of the good life, be understood within and across ethnic and cultural differences. Past research has started to develop this understanding, but there is much yet to know. Ethnicity brings individual and cultural differences to center stage and provides a direction for future positive psychology research and practice that will ensure its relevancy and importance in an ever-changing and increasingly diverse global society.

SEE ALSO: ► Culture ► Ethnic identity

## Eudaimonia

Valerie Tiberius and Michelle Mason

*University of Minnesota*

*Eudaimonia*, the ultimate goal or aim of human life, was the central focus of ancient philosophy. Ancient Greek philosophers were divided about the nature of eudaimonia, and would have had different views about which aspects of life measured by positive

psychologists should be included. The word *eudaimonia*, literally “good spirit” from the ancient Greek words *eu* and *daimon*, is often translated as “happiness” and sometimes as “flourishing.” As it turns out, this seemingly simple matter of translation marks a deep philosophical question about the nature of the kind of life that is worth living for human beings. On the one hand, there is a sense in which we and the ancient Greeks are interested in the same thing: as Julia Annas puts it “a conventionally successful life which the agent finds satisfactory” (1993, p. 453). But there are also important differences that are sometimes overlooked. Further, there are important differences between the ancient Greek notion of *eudaimonia* and the targets of positive psychologists’ research.

*Eudaimonia* differs from some now mainstream understandings of happiness or well-being in three important ways. First, *eudaimonia* represents an all-encompassing goal of life as opposed to one goal among many that a human life might have. It is, in this sense, a “perfect,” “complete,” or “final” aim for us, and there is not an open question about whether it is something we ought to pursue. As we shall see, there are a variety of positions about the substance of a *eudaimonic* life, but the fact that once we know what such a life is then we know *the* goal for human beings was not in question. This represents a contrast to positive psychologists’ thinking about the various notions they study. Positive psychologists who study psychological well-being (PWB), subjective well-being (SWB), or happiness, often say that their target is but one component of a good human life.

Second, *eudaimonia* is much less subjective and less psychological than current notions of happiness or well-being. This is so in two senses. Subjective experiences, such as pleasure and satisfaction, though they may matter for *eudaimonia*, are not typically the only things that matter. Moreover, the ancient Greeks took facts about what contributes to a good human life to have a high degree of generality, so that explanations of what a *eudaimonic* life is would appeal to facts about what it is to be a human being. This certainly distinguishes *eudaimonia* from conceptions of SWB according to which it is an individual’s psychological state that is crucial.

Third, the ancient Greeks tended to agree that *eudaimonia* is attributed to a person’s life as a whole, not to some distinct part of it. It is difficult to understand the ancient Greeks’ claims that virtue is necessary for *eudaimonia* without understanding this point. A single virtuous act may cause a person some pain or require some sacrifice, but the point is that a life of virtue overall is better for you than the life of vice. Our current conception of happiness as a psychological state allows for significant fluctuations of happiness within a person’s life; *eudaimonia* is not volatile in this way.

The three major views about the nature of *eudaimonia* in the ancient period are Stoicism, Epicureanism, and Aristotelianism. According to the Stoics, we live well by not becoming emotionally attached to that over which we have no control. Since the only thing we can control is our character, according to the Stoics, virtue is both necessary and sufficient for *eudaimonia*. Epicurus thought that the life of pleasure is the best life for us, but his view of pleasure made his philosophy

unlike contemporary hedonism. According to the Epicureans, the kind of pleasure that constitutes our final aim, *ataraxia* (sometimes translated “tranquility”), is the state we achieve when we have satisfied our natural desires and are not suffering physical pain or the mental perturbations of unnatural or “empty” desires. Empty desires are desires we have only in virtue of false beliefs, the most significant example for us being the desire for immortality caused by the fear of death. Importantly, Epicurus thought that given our nature as human beings, we would not achieve *ataraxia* without living virtuously and having friends.

Aristotle’s view of *eudaimonia* is complex and there are scholarly debates about what to do with certain elements that seem to be in tension. The standard interpretation is that the good life for a human being is one in which we exercise the virtues and have sufficient good fortune to enjoy money and friends throughout our lives.

According to Aristotle’s so-called “function argument,” the function of a human being is to live a certain kind of life, namely, a life of activity guided by reason. The ethical virtues (*ethike arête*) on this view just are those excellences of character that equip a human being for such a life by ensuring that they relate to the various domains of action and feeling in a rational way. In various domains of action and feeling, Aristotle isolates a settled way of relating to that domain that is neither excessive nor deficient. Aristotle refers to this state as the middle point, or mean, between the two extremes (hence, Aristotle’s “doctrine of the mean” for the virtues). For example, Aristotle begins his discussion of the specific ethical virtues by examining courage (*andreia*, literally “manliness”) as the reasonable feeling and expression of fear in response to fearful situations. Courage contrasts with its extreme of excess, the vice of rashness and its extreme of deficiency, the vice of cowardice. The remaining virtues of character share this triadic form, they are: moderation (*sophrosune*; literally “soundness of mind”); open-handedness (*eleutheriotes*); munificence (*megaloprepeia*); greatness of soul (*megalopsuchia*); a nameless virtue concerning honor; mildness (*praotes*); a nameless virtue concerning pleasing and paining others; a nameless virtue concerning truthfulness in self-presentation; wit (*eutrapelia*); and justice. Exercising the virtues is good for us because we are rational creatures who flourish when we express our rational nature.

Aristotle has had by far the most influence on contemporary moral philosophy of any of the ancient Greek philosophers. One prominent contemporary Aristotelian is Martha Nussbaum who developed the Capabilities Approach to human flourishing with the economist Amartya Sen. According to Nussbaum, the good for a person is true human functioning along various dimensions: life; bodily health; bodily integrity; senses, imagination, and thought; emotions; practical reason; affiliation; concern for other species; play; and control over one’s environment. The good for a person, as such, is comprised of these universal components of human functioning in Nussbaum’s view, though the crucial component of practical reason makes room for some individual variation among persons as concerns what is good for them. Other prominent *eudaimonist* virtue ethicists inspired by Aristotle include Rosalind Hursthouse.

Contemporary Aristotelian philosophical accounts of eudaimonia have some important similarities to approaches in psychology that emphasize psychological well-being (as opposed to subjective well-being). According to these views, well-being consists of meeting core human needs. Two such programs are Richard Ryan and Edward Deci's self-determination theory of well-being, which posits three basic human needs for autonomy, competence, and relatedness, and Carol Ryff's multidimensional account, which posits six basic aspects of human actualization: autonomy; personal growth; self-acceptance; life purpose; mastery; and positive relatedness. These views share with Aristotelian accounts a conception of universal human nature and human needs that determine the constituents of a good life for us. There is also some agreement about what some of the basic human needs or functionings are: All agree that close social relationships and autonomy (akin to practical reason for Nussbaum) are important for a good human life. The important point here is that the *explanation* of the importance of friendship or autonomy is similar and distinguishes PWB and eudaimonia on the one hand from subjective accounts of life-satisfaction and happiness on the other. For example, instead of saying that friendship is good for us because we want it, or because it increases our pleasure or satisfaction, eudaimonists will say that friendship is good because we are social creatures whose nature is best expressed through relationships with others. Insofar as psychologists who work on PWB draw on universal theories of human nature and human development to explain the value of the components of a good life, they are offering explanations that Aristotle would have found familiar.

Despite the similarities between the ancient Greek notion of eudaimonia and psychological well-being, the two notions are not identical. First of all, Ryff's measures of how people are doing along the dimensions of human actualization are self-report measures, which make PWB more psychological than Aristotelian eudaimonia. Aristotle might have insisted on objective measures. Second, PWB is not necessarily seen to be a final or perfect end state, nor is it attributed only to whole lives. Finally, if we look at Nussbaum's list we see an emphasis on political engagement that is absent from psychologists' lists of the elements of the human good. For Nussbaum, "control over one's environment" includes both material and political control, and the latter requires the ability to participate effectively in political choices that affect one's life (2000, p. 80). Nussbaum, following Aristotle, takes being a part of a political community to be essential to a good human life.

Another area of research in positive psychology that resonates with Aristotelian eudaimonism is the current work on strengths of character. Several of the strengths in Seligman and Peterson's classification of strengths – wisdom, courage, justice and temperance – are virtues that Aristotle thought were part of a good human life. Current psychological work on strengths seems to emphasize the way in which developing our strengths gives us better subjective experience (more satisfying lives, lives that seem more rewarding to us). While Aristotle would not have denied that we would find a virtuous life pleasant and satisfying, his justification of the virtuous life did not appeal to self-interest in the same way. The virtuous life includes



concern for other people for their own sakes as well as concern for ourselves. Importantly, a concern for ourselves is not the reason to be virtuous; rather, we should cultivate virtuous habits of choice because conducting ourselves virtuously is living in an appropriate way for beings like us.

Because it is, by definition, *the* overarching goal of human life, eudaimonia is inherently prescriptive in a way that psychologists' notions (whether we're talking about happiness, subjective well-being, or psychological well-being) are not. In this respect, the nature of eudaimonia is outside the domain of empirical psychology. Further, the ancient Greek conception of eudaimonia blurs the line between self-interest and altruism in a way that is at odds with currently mainstream philosophical views. Despite these differences (or perhaps because of them), contemporary psychologists, philosophers, and others have much to learn from eudaimonist theories. They remind us of aspects of the good life that we may do well to remember: tranquility and peace of mind; other-regarding concern; and living in a way appropriate to our nature as reflective creatures.

SEE ALSO: ► Aristotle ► Flourishing ► Good life ► Happiness  
► Virtues ► Well-being

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## Euphoria

Jan C. Kapsner  
*University of Kansas*

The term *euphoria* is of Greek origin and means good (*eu*) burden (*phoria*) or good passion (*phoria*). Euphoria has been used to describe many things, such as the experience of eating chocolate, the effects of being in intense romantic love, the effects of drug use, or simply a state of general well-being. Aron and colleagues described the euphoric effects of intense romantic love as similar to those of cocaine: exhilaration, excessive energy, sleeplessness, and loss of appetite. Research done by Drevets and colleagues involved administering dextroamphetamine (AMPH) (thought to produce euphoria) to participants. The patients described the sensation as a rush of very good feeling they had never before experienced. Buhler described euphoria as a feeling of omnipotence or perfection. Freud described euphoria while under the influence of cocaine as an increase in self-control and an increase in vitality and capacity for work. Definitions of euphoria can take the

form of an elusive metaphor, or can be as technical as the production of certain endorphins.

## Euphoria as a Pathology

In 1963, euphoria was described in technical psychiatric terms in the *Encyclopedia of Mental Health* as a lack of “reality testing” in an individual. When someone who is expected to feel pain, either mentally or physically, feels none, the experience is considered deviant from the social norm and therefore pathological. Euphoria, in its technical psychiatric definition, therefore, is a false happiness, one that does not match cultural expectations. This is similar to Rosenzweig’s description of pathological euphoria, which he stated must be accompanied by a lack of judgment, over-activity, and some sort of thought disturbance.

Ausebel, Goodwin, and Cheien echoed this pathological conceptualization of euphoria when they described a drug user as a person who seeks euphoria due to an “inadequate personality” or “sociopathology.” Euphoria is seen as being desired by those who may be motivationally immature, or that lack other important markers of a mature ego, such as delayed gratification. Hill wrote that alcohol is more likely to produce euphoria in a social deviant, again implying that euphoria is a pathological experience of those who deviate from Western societal norms.

Mania, in bipolar disorder, is considered to have a euphoria component. Items such as elation-happiness, decreased need for sleep, or extreme activity are used to describe the behavioral aspects of euphoria associated with mania in the Center for Epidemiological Studies-Depression Scale (CES-D) extended version, created by Radloff. Orvaschel created the measure for Affective Disorder and Schizophrenia for School-aged Children, Epidemiologic Version (K-DADS-E). This measure determines if children have experienced euphoria by questioning whether there have been times when they have felt almost too good or on top of the world. Fishman also notes that euphoria is associated with multiple sclerosis, and is defined as behavior that is impatient, inconsiderate, and quarrelsome.

## Physiological Effects

Euphoria has long been associated with the various physical and mental effects of taking a variety of drugs, from heroin (a depressant) to caffeine (a stimulant). The medical model latched onto the term euphoria to describe these effects. Traditionally, the use of the word euphoria focused on a drug’s ability to sustain or facilitate euphoria rather than to create it. The current definition of euphoria in the medical world, however, considers it as the *effect* of drug use. Contemporary research has been concerned with what parts of the brain are connected with euphoria, as well as other physiological effects. In 1985, Wise and Bozarth asserted that the activation of dopaminergic systems accounts for the euphoria associated

with amphetamines and cocaine, as well as opiates. Drevets and colleagues found that the euphoric response to AMPH correlates positively with the amount of dopamine (DA) released in the ventral tegmental area (VTA), meaning that amphetamine-induced dopamine release in the human ventral striatum correlates with euphoria. Peter, as well as Sacchelli, Mitchell, and Seward have found that magnetic resonance imaging (MRI) showing lesion burden and atrophy are associated with euphoric personality changes in multiple sclerosis. Davidson, Eckman, Saron, Senulis, and Frieson found that euphoria (without the use of drugs) is associated with greater left than right frontal lobe activity.

The physiological effects of euphoria have also been explored by Hughes in relation to trance channeling. *Trance channeling*, a phenomenon unique to late-twentieth century American culture, is the communication of information through a human from a source that exists on a different dimension of reality than ours, which can produce feelings of euphoria. Prince has suggested that the euphoria in trance states may be related to the stimulation of endorphins. Appenzeller, Standefer, Appenzeller, and Atkinds, as well as Fraioli, Moretti, Poolucci, Alicicco, Cresenzi, and Fortunio, have found that endorphins (producing analgesia or euphoria) are stimulated by strenuous motor activity, and trance channeling sometimes includes dancing or other strenuous forms of motor activity. This experience is much like the high or euphoria experienced by many athletes (often called a “runners high”). Prince also hypothesized that the endorphin-produced euphoria associated with trance channeling could be due to the psychological stress (also found with some psychedelic substances) related to the experience of disassociation. Meditation, a complex mental process that involves changes in cognition, sensory perception, affect, and autonomic activity, is a practice that is also often associated with the experience of euphoria. Newberg and Iverson believe that meditation stimulates the release of b-endorphin (BE), which is an opioid that depresses respiration, reduces fear and pain, and produces sensations of euphoria.

SEE ALSO: ► Dopamine ► Endorphins ► Enjoyment  
► Positive emotions

## European Network for Positive Psychology

Ilona Boniwell

*University of East London, UK*

The European Network for Positive Psychology (ENPP) is a collective of European researchers and practitioners with shared interests in the science and practice of positive psychology. The ENPP serves as a focal point for positive psychologists around the European geographical area and strives to advance the field of positive psychology in several broad domains. First of all, it aims to build on distinctively European aspects of research and practice, including recognition of the importance

of the role of the social context and multi-cultural perspectives. Second, it aspires to ensure the highest possible standards in conceptual rigour, experimental design and data analysis. Third, it advocates a multi-disciplinary approach, moving beyond psychology to positive science, including biomedical science, social science, economics, and the applied sciences. Finally, it strives to promote population flourishing by disseminating findings to educators, health and care professionals, business organizations and policy makers.

The ENPP was established at the first European Conference on Positive Psychology in June 2002. It evolved from the European Student Network of Positive Psychology (ESNPP), founded in April 2001 by Ilona Boniwell. The objectives of the ESNPP were to promote positive psychology throughout Europe through presentations, publications and by highlighting educational and research opportunities available to young researchers. The evolution of the ENPP from its student predecessor was an unusual but successful bottom-up process in forming an organization.

Membership of the ENPP is free of charge and enables the network members to:

- belong to the European community of positive psychology researchers and practitioners;
- receive up-to-date information about positive psychology events and publications;
- be kept informed about the latest developments in positive psychology; and
- make contacts with other researchers and practitioners in Europe for knowledge exchange and collaboration.

ENPP members are drawn from 34 countries. Every country that is eligible to join can nominate a representative who is responsible for national events and the dissemination of national information. The ENPP website, <http://www.enpp.org>, provides a focal point for its members, who also receive regular updates through a newsletter. The ENPP website details information about positive psychology books, journals, seminars and meetings, resources for teaching positive psychology, and media coverage. It also lists several European positive psychology centres that have been established, including the Centre for Applied Positive Psychology (CAPP) in Coventry, England, the Centre for Confidence and Well-being in Scotland, the Centre for Well-being within the New Economics Foundation (NEF) in London, and the Well-being Institute at the University of Cambridge.

The primary activity of the ENPP is the organization of the European Conferences on Positive Psychology. The first conference was held June 28–30, 2002, in Winchester, UK. Supported by the British Psychological Society, it attracted 150 attendees and became the antecedent of the subsequent European Conferences on Positive Psychology. The Second European Conference on Positive Psychology was held July 5–8, 2006, in Verbania, Italy. Supported by Gallup Europe, it was attended by 250 delegates. The University of Minho in Braga, Portugal was the home for the third conference, which attracted 400 delegates. Chaired by Teresa

Freire, the conference introduced several new topics for positive psychology, including serious leisure and the development of complexity. The Fourth European Conference on Positive Psychology is planned for July 2008 in Opatija, Croatia. The 2006–2008 chair of the ENPP is Professor Antonella Delle Fave (University of Milan, Italy). Past chairs include Dr Ilona Boniwell (University of East London, UK), Prof Alex Linley (Centre for Applied Positive Psychology, UK), Dr Jane Henry (The Open University, UK) and Prof Felicia Huppert (Cambridge University, UK).

SEE ALSO: ► Positive psychology (history) ► Positive Psychology Network

## Evolutionary Psychology

Timothy Ketelaar

*New Mexico State University*

*Evolutionary psychology* is the application of the core concepts and basic principles of evolutionary biology to the study of the mind and behavior. Human evolutionary psychology focuses on developing and testing models of psychological adaptations (mechanisms, processes, and behavioral strategies) to specific problems that humans have encountered during their evolutionary history. Evolutionary psychology stems from what is known as the adaptationist program in evolutionary biology. *Adaptations* are defined as recurring phenotypic characteristics that reliably develop over the life history of an organism and that were favored by natural selection because – over time – these traits systematically interacted with stable and recurring features of the environment in a manner that promoted the propagation of the genetic basis of these characteristics better than the alternative designs existing in the population during the period of selection. Support for special design consists of evidence that a particular phenotypic trait possesses a degree of complexity, efficiency, and reliability for a specific functional purpose that far exceeds what could have arisen by chance (i.e., mutation, genetic drift) alone or as a by-product of some other trait that evolved because it solved a different adaptive problem.

What makes evolutionary psychology distinct from other evolutionary approaches to human nature – such as its precursor, sociobiology – is a focus on understanding the psychological mechanisms that produce manifest behavior. For example, rather than focusing on manifest behavior per se (e.g., French or German utterances), an evolutionary psychological treatment of language focuses instead on the psychological mechanisms – e.g., the universal grammar – that gives rise to language learning in particular environments. According to an evolutionary psychological perspective, French and German utterances are not candidates for psychological adaptations; however, the distinct psychological processes that underlie the human capacity for language learning – the universal grammars of syntactical, phonologic, and pragmatic systems – are considered to be excellent

candidates for psychological adaptations because these features of language show evidence of special biological design.

Although early sociobiological treatments of human nature did not argue that French and German languages were themselves adaptations, early sociobiological approaches did tend to focus on manifest behavior *per se* as the proper unit of evolutionary analysis. By contrast, the modern field of evolutionary psychology arose in response to this concern that sociobiology placed too much focus on manifest behavior and analyses of current adaptiveness. According to evolutionary psychologists, a particular phenotypic trait – e.g., the so-called universal grammar capable of generating syntactical rules of German or French – can be considered a candidate for an evolved adaptation even if the current operation of this system is maladaptive. What matters, argue evolutionary psychologists, is whether the trait in question displays evidence of “special design” for solving a specific adaptive problem in ancestral environments. In some cases, this adaptationist approach to psychology leads to the discovery of “design features” of the human mind (evolved taste preferences for fatty foods, evolved ethnocentrism or wariness of out-group members) that appear maladaptive in modern post-agricultural societies, but whose systematic features are well illuminated by the Darwinian spotlight of adaptationism. As evolutionary biologist George Williams (1966, p. 16) once noted: “Is it not reasonable to anticipate that our understanding of the human mind would be aided greatly by knowing the purpose for which it was designed?”

## Major Topic Areas

Evolutionary psychology is perhaps best known for its numerous contributions to our understanding of the psychological mechanisms involved in human mating. Much of this work has been inspired by applying insights from Trivers’ theory of parental investment and sexual selection which posits that the sex that makes the largest investment in producing offspring will be the more discriminating in selecting mates. Insights from parental investment theory have shed light on cross-culturally observed similarities and differences between the sexes in regard to mating strategies, mate preferences, and emotional responses to infidelity.

Although research on the psychology of mating has dominated much of evolutionary psychology, the study of cooperation among genetically unrelated individuals has been a large part of empirical work in evolutionary psychology. This research focuses on the observation that while nepotistic cooperation is common across taxa, humans often engage in quite costly acts of cooperation even when the agents involved are not close genetic relatives. Evolutionary research on human cooperation has ranged from studies of the psychological mechanisms underlying reasoning about social contracts (so-called “cheater detection” mechanisms) to the identification of successful strategies of cooperation in repeated interactions (e.g., “tit-for-tat” reciprocity).

In addition to research on mating and cooperation, the young field of evolutionary psychology has seen research on a wide spectrum of topics including aggression, sexual selection and cultural production, Darwinian medicine, emotion, inter-group conflict, moral reasoning, and religion, among many other topics.

Although evolutionary psychology, as an approach to psychology, was initially met with much criticism and even hostility, the zeitgeist in contemporary psychology has appeared to be slowly shifting away from attacking evolutionary arguments as glib, unfalsifiable, untestable “just so” stories and toward an acceptance of the fact that evolutionary psychology is one of many useful tools in the toolkit of ideas that scholarly researchers can apply to the study of human nature. Fascinating future directions in evolutionary psychology include recent theoretical developments in multilevel selection, gene-culture interaction, and a more sophisticated understanding of the role of developmental processes in adaptive design.

SEE ALSO: ► Epigenetics ► Hardiness

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## Existential Psychology

Paul T. P. Wong

*Tyndale University College*

Existential psychology is about human existence and the human drama of survival and flourishing. It is inherently positive, because it emphasizes the courage and responsibility of confronting existential anxieties and living an authentic life. Unfortunately, the scholarly work of existential psychology tends to be cloaked in ambiguous terms and the popular existential literature tends to focus on the darker side of the human condition. The end result is that most people overlook the creative, positive aspects of existentialism. Existential psychology can learn from positive psychology's scientific methods and its clarity in communication.

Positive psychology (PP) has now come full circle to its existential roots. PP is intrinsically existential, because it is concerned with such fundamental questions about human existence as: What is the good life? What makes life worth living? How can one find happiness? However, these existential questions cannot be fully addressed through a positivistic approach, because human life cannot be reduced to a set of test scores. A maturing PP, secure in its place in the chronicles of mainstream psychology, can now return to its existential-humanistic roots to rediscover the richness of lived experience and the many pathways to meaning in life.

Existential positive psychology (EPP) or positive existential psychology represents a natural amalgam between PP and existential psychology. From the perspective of existential psychology, there are six ultimate questions about human existence:

1. *Who am I?* What defines me? Who am I when everything is stripped away from me? What is the essential core of my identity?
2. *How can I be happy?* Why am I so bored and dissatisfied with life? What is the good life? Is this all there is to life?
3. *What should I do with my life?* How shall I then live? What is my calling? To what should I devote the rest of my life?
4. *How do I make the right choices?* How do I know that I am making the right decisions regarding career and relationships? How can I tell right from wrong?
5. *Where do I belong?* Why do I feel so alienated and alone in this world? How can I develop a deep and meaningful relationship? Where can I find acceptance? Where is my home?
6. *What is the point of striving when life is so short?* Why should I struggle to survive when life is transient and fragile? What is the point of building something only to see it swallowed up by death?

All of these questions are related to the uniquely human capacity to reflect on life experiences and seek understanding. It is the spirit of asking tough questions and rejecting pre-packaged, easy answers that characterizes existential psychology. EPP is open to wisdom, insights, and facts of life from all sources regardless of the paradigm of knowledge claims and cultural backgrounds, thus providing a richer research agenda. In short, EPP broadens the definition of PP as the study of ultimate concerns through integrating both positive and negative aspects of the human condition in order to create a better future for self and others. What qualifies EPP as positive psychology is its emphasis on the human potential for positive change and growth.

Yalom has already identified four existential anxieties: death, freedom, isolation, and meaninglessness. Wong added two more existential questions related to identity and happiness. Together, these six issues are the recurrent themes of human existence, even though they may remain unconscious or latent in some individuals.

## **From Identity Crisis to the Quest for Authenticity**

Identity crisis is not limited to adolescents. It can be an ongoing struggle to define and redefine ourselves when we go through major life transitions or upheavals. The ongoing search for identity requires self-knowledge. The ancient Delphic injunction carved into the lintel at the Temple of Apollo, "Know Thyself," still resonates with the postmodern generations. Without a clear sense of self-knowledge, we can go through life without ever knowing who we really are and what we really want in life.



The discomfort of identity crisis is necessary for initiating the quest for authenticity. However, defense mechanisms often keep identity anxiety at bay and the social pressure of conformity and enculturation provides an easy escape from this existential quest. The dehumanization of a competitive capitalistic society further narrows people's vision to material gains and temporal comforts. As a result, people are confused about their true identity and their unique place in the larger scheme of things. Thus, the quest for authenticity remains a challenging and poignant task in a consumer culture.

Authenticity has been a recurrent theme in the existential literature. Heidegger differentiates between the nonauthentic and authentic mode of living. Nonauthentic people give up their individuality and responsibility for the security of being part of a herd. In contrast, authentic people assume responsibility to live in a way that is consistent with their true nature and core convictions. They strive to become what they were meant to be, in spite of the anxiety and risks involved.

There are no short cuts to authenticity. Test scores on personality, vocational interests and signature strengths can be helpful, but there is no passion in cold numbers, no inspiration in formulae. The process of authentication often begins with a moment of awakening, a deepening of conviction about core values, and a felt sense of one's true identity. It is the discovery of an inner vision about one's uniqueness and singularity that endows life with deeper meaning.

But this is just the start. The pathway to authenticity entails risks, setbacks and suffering, especially when it is contrary to social norms. In many instances, the quest for authenticity means persecution and even death, because those who dare to march to a different drum and challenge the status quo are likely to be maligned, marginalized and even martyred. Thus, the quest for authenticity and meaning is not always compatible with the pursuit of happiness and the good life. To live an authentic and meaningful life means that one cannot deny one's true nature and calling even if it means death. Jesus is a case in point. So is Socrates.

From an existential perspective, authentic happiness flows from the authentic mode of living. Schumaker (2007) comments: "Existentialist Albert Camus gets to the heart of happiness when he equates it with harmony of living" (p. 83). This harmony can be achieved not only by doing what one is best at, but also by living in a society that meets the deep-seated human needs for social connection and spirituality. In other words, EPP places the human quest for self-identify in a larger context, acknowledging the importance of culture and environment.

## **From the Crisis of Discontent to the Quest for Happiness**

At the heart of our quest for happiness is some kind of discontent with life as it is – this dissatisfaction is more than a cultural phenomenon and more than a socially conditioned expectation; it may be related to a universal human tendency towards personal growth and self-actualization. For those who are already enjoying swimming

in the stream of life, the question “Am I really happy?” may still arise. Even in the best of circumstances, when people have fulfilled all of their most cherished dreams, there is always something nagging about whether this is all there is to life and whether something better may be just beyond one’s horizon.

The tension between contentment and discontentment constitutes a familiar existential crisis. If total contentment means optimal life satisfaction, it may also spell entropy and death, because there is nothing more to strive for. EPP does not endorse the ideal of maximizing happiness or optimizing life satisfaction, because such a goal is unrealistic and contrary to our best interests as human beings.

Discontentment is a double-edged sword; it automatically distracts from life satisfaction, but also provides an opportunity for personal growth and social reform. Dissatisfaction with where we are motivates us to advance to where we want to be. EPP recognizes that discontentment is an essential part of human nature, but distinguishes healthy and unhealthy discontent. Personal greed and blind ambition represent the destructive type of discontent, while striving for higher values and greater virtues represents healthy discontentment.

At present, the happiness craze is sweeping across Western societies. Schumaker laments that many psychologists and coaches have become merchants of happiness, promising people the moon: a simple formula for instant success and happiness. They mass market their happiness prescriptions like any other feel-good commercial product. Existential psychologists would feel very uncomfortable with such commercialization of easy happiness. They agree with Frankl that the single-minded pursuit of happiness has the opposite effect of driving it away, but happiness comes through the back door as a by-product when we pursue meaning and authenticity.

Existential philosophers and psychologists have long discovered that authentic happiness arises from embracing suffering as the essence of the human condition. They see life as a series of paradoxes, predicaments and problems. Life is also full of striving, setbacks and victories. The dynamic interplay between dualities is one of the hallmarks of EPP. Wong’s duality hypothesis states that positives cannot exist apart from negatives and that authentic happiness grows from pain and suffering. This hypothesis reflects Albert Camus’ (1968) insight that “There is no joy of life without despair” (p. 56) and Rollo May’s (1981) observation that “The ultimate paradox is that negation becomes affirmation” (p. 164).

Many people are awash with information and images of happiness, and yet still drowning in a sea of misery. The reason for this paradox is that they try to avoid suffering, sugarcoat negative emotions, and seek an express highway to a Disneyland-type of happiness. Such superficial happiness may actually prevent them from personal growth and make them vulnerable to depression. In contrast, EPP advocates the following three types of mature happiness: (a) authentic happiness which flows from being an authentic person, (b) eudaimonic happiness which comes from doing virtuous deeds and (c) chaironic happiness which arises from our spiritual nature.

*Chaironic* comes from the Greek root, “denoting a spiritual gift.” It is a kind of spiritual blessing or a gift of happiness that is bestowed on us independent

of our abilities and circumstances. The calm joy of Zen Monks and the ecstasy of Christian mystics (e.g., Saint Francis of Assisi) are examples of chaironic happiness.

In sum, EPP considers happiness as a process rather than a product, an orientation rather than an outcome. Happiness is never a static state, because all emotions change. Rather, happiness is a gift, a blessing, when individuals maintain their faith and devote their lives to pursue their unique calling in serving something much bigger than their self-interests. In the process, they may be surprised by happiness in the most unlikely places. Research on chaironic happiness will increase our understanding of the nature of happiness in the crucible of suffering, such as chronic pain and terminal illness.

## From Meaninglessness Anxiety to the Quest for Meaning and Purpose

The most enduring question in philosophy, religion and psychology is regarding the meaning of life. At some point in life, many things can trigger one's quest for meaning: A personal encounter with death, a sudden reversal of fortunes, a tragic event, or a moment of disillusionment with the emptiness of success – all have the potential to arouse one's existential anxiety of meaninglessness.

Since we only go through this life once, we have reasons to wonder how to make the most of it. The worse fear is not death, but the discovery that we have never really lived when the time comes for us to die. We all have the desire to live fully, to do something significant, and to make a difference, so that we don't have to dread the death-bed realization that we have squandered away our only life. Therefore, we dread a meaningless life as much as we dread the terror of death.

Meaninglessness may also be the most pervasive existential anxiety that negatively impacts every aspect of our lives. Paul Tillich thinks that *meaninglessness anxiety* is about the loss of an ultimate concern, which leads to the questioning of the meaning of one's existence and everything one does. Frankl emphasizes that the existential vacuum or meaninglessness is responsible for many mental and societal problems, while a clear sense of meaning and purpose is the key to positive mental health.

Therefore, EPP focuses on the quest for meaning and purpose rather than happiness as the major research area. Frankl has identified three values of meaningful living: 1) Creative value – we give of ourselves to the world through creative efforts; 2) Experiential value – we receive something from the world, such as love and beauty; and 3) Attitudinal values – we adopt a positive attitude towards negative situations beyond our control. These three values cover the whole spectrum of our experiences of meaning.

Wong has discovered seven major sources of meaning: achievement; acceptance; relationship; intimacy; religion; self-transcendence; and fairness through the implicit theories methodology. Subsequent cross-cultural research has found that

these sources of meaning are important to several Asian countries as well. This line of research demonstrates that the quest for meaning is not a solitary enterprise – it needs social support and a just society.

Finally, Wong has developed the PURE model as a framework for individuals to discover and create meanings for their lives. This is basically a self-regulatory model, which allows trials and errors and constant adjustments to align actions to one's core values and life calling. The *P* stands for purpose and life goals, *U* stands for understanding the demands of each situation and life as a whole, *R* stands for responsible actions and reactions consistent with one's purpose and understanding, and lastly, *E* represents the constant need for evaluation to ensure authenticity and efficacy. The PURE model has been effectively applied to counseling and coaching.

## **From Isolation Anxiety to the Quest for Community**

We were all born into this world alone and we will leave this world alone. Our attachment to others is at best impermanent, because people do change and they do leave us through separation or death. Displacement and alienation in an impersonal and competitive world only further increase our sense of loneliness. The unraveling of social institutions such as family and community is contrary to human nature, because we are wired for relationships and we are meant to be social animals.

EPP emphasizes the need for building authentic relationships and belonging to a supportive community. Buber's model of the "I-Thou" existential encounter represents one of the promising ways to open up to each other authentically and build bridges across the barriers that separate us. The collectivist value of emphasizing relationships and harmony in all human interactions is another approach to overcoming alienation and loneliness.

Community is a powerful antidote to isolation anxiety. There is a deep-seated longing in human nature to belong to a place where we can call home – a safe and supportive place, where we are free to be ourselves and where we are accepted as a significant member. This place may be a family, a church, an organization or a neighborhood. This is where we learn how to care for each other and grant each other grace; this is where we learn how to live and work together by placing group interests above egotistic desires.

However, community is a fragile ecosystem, which can be easily disrupted by selfish and inconsiderate acts. It takes empathy, kindness, tolerance, and self-sacrifice to build a positive community. Community building involves civil virtues, social activism and collective coping. Once we have achieved a genuine community, our individual lives will be enriched in proportion to the vitality and harmony of the group. The final caveat is that even when we have established an intimate network of social support and derived a great deal of satisfaction from it, we remain solitary beings. EPP accepts isolation anxiety as an existential given, but recognizes that

it is through our loneliness that we seek community and intimacy as major sources of personal meaning.

## **From Freedom Anxiety to the Quest for Responsibility**

Freedom poses a problem for people. On the one hand, too much freedom can be overwhelming. On the other hand, too little freedom can lead to despair and fatalism. However, even in the Nazi concentration camps, Frankl maintained that one can still maintain attitudinal freedom by taking a heroic and defiant stance.

Freedom implies responsibility, because we are responsible for the consequences of the choices we make. Fear of responsibility drives us to escape from freedom, while denial of responsibility drives us to abuse our freedom. There are also problems associated with assuming too much responsibility, because this may either crush us with too much work or paralyze us with too many worries. EPP is concerned with how to strike a healthy balance between freedom and responsibility.

In the Western world, there is too much emphasis on freedom but not enough on responsibility. Frankl has repeatedly warned that freedom without responsibility leads to anarchy, while responsibility without freedom leads to tyranny. He points out that conformity, fatalism and collectivism can all seduce us to avoid personal responsibility. Blind allegiance to any organization or ideology requires us to suspend our critical faculties and thereby undermines our authenticity.

## **From Death Anxiety to the Quest for Death Acceptance and Self-transcendence**

Death anxiety poses a problem for contemporary American positive psychology, because it falls outside the parameters of positive traits, positive experiences and positive organizations. For EPP, death anxiety constitutes an impetus to personal and spiritual growth.

Death is the only certainty for all living organisms. However, human beings alone are burdened with the cognitive capacity to be aware of their own mortality and to fear what may follow after death. Furthermore, their capacity to reflect on the meaning of life and death creates additional existential anxiety. The inevitability of death makes its presence felt in every arena of human existence. How we react to death will impact how we live, just as how we live influences our journey toward death. There is an intimate link between good living and good dying, and this link represents the last frontier of positive psychology.

In the past forty years, the psychology of death has been dominated by death anxiety. However, in recent years, Wong and his associates have emphasized the existential quest for death acceptance. They have developed the Death Attitude Profile, which identifies three distinct types of death acceptance: a) *neutral death*

*acceptance* means facing death rationally as an inevitable end of every biological life and attempting to make the most of this present life through creative works; b) *approach acceptance* is rooted in transpersonal religious/spiritual beliefs in a desirable afterlife; and c) *escape acceptance* means considering death as a better alternative to a painful existence.

Life and death are two sides of the same coin. There is no life without death and there is no death without life. Wong's meaning management theory (MMT) recognizes that death anxiety can have either a negative or a positive impact, depending on how one reacts to it. We can never escape from the reality of death, but we can always use our capacity for meaning, spirituality and narrative construction to transform death anxiety. If we regard death as a reminder of our own mortality and the need to live authentically, then death anxiety will not only facilitate death acceptance, but also encourage self-actualization and self-transcendence. Paradoxically, we need to confront and embrace death in order to live meaningfully and vitally.

## Conclusion

This article provides an existential conceptual framework for an expanded vision of PP and opens up new frontiers for research. It shows that all six types of existential anxieties are essential for human flourishing. The main message is that people not only need to confront these negative existential givens, but they can grow as a result of such encounters. Properly understood, existential psychology is about the human drama of courage, creativity, celebration and faith in the midst of inevitable suffering and death.

EPP is intended for all people, especially the suffering masses, with its emphasis on integrating negative experiences with positive ones. EPP highlights the painful human strivings, which Western societies' consumer culture wants us to ignore. EPP stresses that it is only through struggle and fortitude that we grow psychologically and spiritually. It is only through embracing life in its totality and wrestling with ultimate concerns that we can uplift humanity and improve the human condition.

SEE ALSO: ► Authenticity ► Frankl, Viktor ► Meaning  
► Personal responsibility

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# Experience Sampling Method

Anthony D. Ong and Thomas Fuller-Rowell

Cornell University

*Experience sampling method* (ESM) is a quasi-naturalistic method that involves signaling research participants at repeated times throughout the day and asking them to report on the nature and quality of their experience. The method has been applied to study an array of psychological phenomena that include the study of behaviors, emotional experience, interpersonal processes, personality, physical symptoms, and physiological responses. Experience-sampling procedures stand in contrast to standard self-report procedures, such as traditional questionnaire and diary methods. Although a form of self-report, experience sampling methods do not rely on the need for respondent retrospection or memory.

ESM was developed as a tool to study daily events and evolved because of the limitations of other methodologies in explaining the range of situational circumstances experienced in everyday life. A fundamental benefit of ESM is that it permits the examination of reported events and experiences as they occur in their natural context. In experience sampling, people report what is presently occurring, often called a *momentary experience* (e.g., “How do you feel *right now*?”). Well-designed ESM studies can answer questions regarding aggregates of experiences over time, temporal patterns of experiences, and the factors affecting changes in these experiences. For each type of question, ESM studies can provide information about the average person, between-person variability, and predictors and determinants of this variability.

ESM study designs have often been classified into the three categories of interval-, signal-, and event-contingent protocols. The interval-contingent design, the oldest method of daily event recording, requires participants to report on their experiences at regular, preset intervals. Signal-contingent designs rely on some signaling device to prompt participants to provide momentary reports at fixed, random, or a combination of fixed and random intervals. Finally, event-contingent designs require participants to provide a self-report each time the event in question occurs. This design enables the assessment of rare or specialized events that would not necessarily be captured by fixed or random interval assessments.

Although the ESM offers many benefits, especially when compared to traditional questionnaires, it also has limitations. One practical limitation is that ESM often requires a level of participant commitment and dedication rarely required in other types of research studies. The burden of repeated queries places substantial demands on the participant. Some of these concerns may be offset by carefully explaining the study and procedures to participants. The intrusive nature of the ESM, however, raises a second concern: that of self-selection bias, which may result in certain types of individuals being over-represented or under-represented in the study, to a degree perhaps greater than in a traditional study. As a result,

generalizations of findings must be done carefully, keeping possible self-selection bias in mind.

A second limitation relates to participant cooperation. Participants may not fill out ESM protocols, or may not do so at specified times or in the specified manner. In addition, participants' response rates may vary systematically with time of day or type of activity. In general, compliance is likely to be based on participants' trust that the study is important and worthwhile. A third limitation concerns the self-report nature of independent and dependent variables, which may artificially inflate observed correlations. Self-report methodology, however, seems almost unavoidable if researchers wish to assess subjective experience throughout the day. Investigators can check indirectly for common method bias by examining correlations among momentary-sampling variables. If at least some of these correlations are low, this would indicate that participants are at least differentially responding to the questionnaires. Finally, ESM procedures may affect the very phenomenon being studied. Reactivity or priming effects may occur, such that repeated measurement of psychological variables may cause changes in people's experiences.

Technological innovations in ESM have offered major advantages in terms of data entry, management, and accuracy. Computerized ESM procedures have allowed tremendous flexibility for item presentation (e.g., items may be presented in fixed and/or random order), which can minimize the use of a response set and statistically correct for order effects in item presentation. Computerized ESM procedures also reduce human error associated with data management (e.g., devices transfer data directly to a master computer), thus avoiding tedious and time-consuming data entry. Although handheld devices are the most popular means of electronic data collection, researchers have also turned to Web-based questionnaires or to telephone protocols. One benefit of these methods is their ability to secure the responses immediately while maintaining many of the advantages of handheld data collection. Their main drawback is inconvenience for participants, who complete an ESM entry on a phone or a computer.

Finally, because ESM is an intensive repeated measures methodology, it allows for simultaneous within-person (idiographic) and across-person (nomothetic) analyses. Using ESM, researchers can determine the within-person relation for each person in a study (e.g., the relation between daily events and mood) and then seek to account for variability in such relations. Within-person analyses are crucial in positive psychology research for several reasons. First, ESM procedures can test, rather than assume, the validity of the nomothetic approach (i.e., that what is true for the average is true for each individual). This assumption can be tested by summarizing experience or behavior within an individual over time (and across situations), and by testing if the pattern generalizes across individuals in the study. That is, with ESM, researchers can compute a separate parameter for each person (for example, mean positive mood over time), and then test the extent to which individuals do or do not deviate from the average parameter. Within-person analyses also provide conceptual understanding not attainable through strictly



cross-sectional designs. With ESM, researchers can determine the relations across variables within people. This is conceptually and empirically distinct from computing the relations between variables across people, as with standard cross-sectional research.

In the broadest sense, ESM can facilitate ecologically-valid research. Moreover, ESM studies may serve as a bridge to some of the more imposing methodological gaps in positive psychology research: between internal and ecological validity, between one-shot observations across individuals and multiple observations within individuals, between global retrospections and real-time experiences, and between theorizing about contextual variations and examining them empirically.

SEE ALSO: ► Self-report instruments

# F

## Familism

Lisa M. Edwards and Brittany N. Barber  
*Marquette University*

*Familism* is the term used to denote a loyalty and strong identification with one's family. Individuals with a high level of familism have a strong sense of attachment to their family and often consider the desires and needs of the family over their own. In many cases, family includes extended relatives such as aunts, uncles and cousins.

Familism is considered a multidimensional construct comprising of three components. The most commonly researched dimension is *attitudinal familism*, which refers to the feelings about loyalty and solidarity among family members. *Structural* or *demographic familism* includes the spatial boundaries of a family such as the presence of blood relatives in a person's life. Finally, *behavioral familism* refers to the actions and activities that family members engage in, such as having family reunions or calling one another on the phone. Of the three dimensions, attitudinal familism tends to be more stable over generations.

Psychologists, anthropologists, and others have noted that familism is a value present to different degrees in individuals of various backgrounds. The word familism can hold different meanings in different cultures, however, and may manifest itself in different ways. An individual's culture largely shapes how they view family and vice versa; thus, the construction, development, and recognition of the family of origin are also different depending on the cultural background of each individual.

In African American culture, for example, familism often means having a feeling of brother/sisterhood with both related and unrelated members of the family. Like other cultures, African American families tend to have larger extended families

that are still considered part of the immediate family (including multigenerational and single parent families). Tasks such as caring for the children and for the elderly are often shared among all family members.

For Asian Americans, familism may have a slightly different meaning. One important aspect of familism for Asian Americans is respect for elders, especially the father. Families are seen as a whole group of people who respond to and respect the authority of the father as the leader. Negative behaviors, such as not succeeding academically or doing other misdeeds, are often seen as shameful to the entire family, not just the person who committed them.

*Familismo* is the Spanish word for familism and it signifies the pervasive influence and importance of family in Latino culture. It is characterized by strong feelings of loyalty, unity, reciprocity, commitment, interdependence, cooperation, and affiliation. In Latino culture, the family's needs often supercede the needs of the individual and family honor must be upheld. Typically, Latino families comprise of many extended family members, including those who live nearby, but not necessarily in the same household.

The Native American family has many different types of structures (patriarchal, matriarchal, and egalitarian), but in all of them the extended family takes a place of importance and members tend to have more contact with extended family than they do with friends. Familism for Native American families often centers on respect for the tribal identity. In addition, both respect for elders and for collective processes are valued. Responsibility is shared among members and an individual's personal identity and self-concept are expected to develop from the family, community, and tribal customs and beliefs.

Familism in European American cultures is difficult to generalize because it encompasses so many different cultures that have been influenced by European culture. Of note, however, is that traditional beliefs tend to come from the country of origin. Also, the success of the family is more important than the welfare of the individual and children tend to follow the commands of their elders. On the other hand, independence, exploration, and self-control, are also valued. Researchers have noted that familism in European American culture is a diverse and much more loosely defined construct than is seen in other ethnicities.

SEE ALSO: ► Cultural values ► Family quality of life

## Family Functioning

John W. Eagle and Shannon E. Dowd-Eagle  
*Rhode Island College*

*Family functioning* represents the ability of the family system to operate in a cohesive yet flexible manner. It is a key variable/process related to family stress, adaptation, and resilience. Healthy family functioning is associated with positive

outcomes in reducing family stress, enhancing child development, improving family interactions, and increasing family resilience.

Families have long been viewed from a systems orientation. Within a systems framework, Anderson and Sabatelli conceptualize the family as a complex structure consisting of interdependent groups of individuals who: a) have a mutual sense of history; b) experience a degree of emotional bonding; and c) develop strategies for meeting the needs of family members and the entire family. A developmental and family life-cycle perspective is also helpful in understanding family functioning. A family's ability to function effectively is a multidetermined process occurring over time and developed in response to complex and changing conditions.

Patterson described the concept of family functioning, embedded within an ecological and developmental framework, as an ongoing and developing process occurring at multiple levels. One level focuses on the interactions between individual family members within the family unit, whereas a second level centers upon interactions between the family unit and the broader ecology. This view of family functioning highlights the connection between the family system and the larger community context, thereby emphasizing the importance of both family and community efforts in enhancing functioning.

## **Current Models and Theories**

Although there are several different theories or models of family functioning, three of the more prevalent are discussed below. All of these models are based on a systems approach to family functioning. One of the most renowned theories is the McMaster model of family functioning, developed by Epstein and colleagues. The McMaster model has been evolving and evaluated over the past 30 years. According to this model, the primary function of the family is to provide an environment that supports the physical, social, and emotional development of family members. Within the McMaster model are six dimensions of family functioning that determine the family structure, organization, and transactional patterns. These dimensions include problem solving, communication, roles, affective responsiveness, affective involvement, and behavior control. Healthy family functioning is not represented by one sole dimension; rather, many dimensions are needed to represent the complexity of functioning families.

Similarly, the circumplex model of marital and family systems has been developed and researched over the past 25 years. Olson and Gorall describe three dimensions of family functioning represented in the circumplex model: family cohesion, flexibility, and communication. The level of cohesion, flexibility, and communication describes both the nature of interactions within the family system and between family members and the larger community. Not only do these dimensions provide insight into family dynamics, but they also have implications for how community members can support and strengthen the family unit. Within cohesion and flexibility dimensions of the model, balanced or moderate levels (versus extreme levels) are

associated with more optimal functioning. Positive communication skills allow families to modify their levels of cohesion and flexibility based on the demands of the situation or developmental context.

The Beavers systems model of family functioning, as described by Beavers and Hampson, provides a cross-sectional approach to family functioning. In this model family functioning falls along two dimensions: family competence and family style. Family competence refers to the structure, available information, and adaptive flexibility of the family system. High levels of family competence require both structure and the ability to adapt the structure to meet the needs of family members. Family style relates to a stylistic quality of interactions within the family unit. Healthier functioning is associated with families that place importance on their relationships both within and outside the family.

## Dimensions of Family Functioning

Currently, there is no unitary definition of the construct of family functioning. However, it is widely accepted that family functioning is a multidimensional construct that is highly influenced by the relational processes within families. Common factors related to family functioning are described below.

### Family Cohesion

*Family cohesion* is defined as “family members’ close emotional bonding with each other as well as the level of independence they feel within the family system” (Turnbull & Turnbull, 1997, p. 108). The degree of emotional connectedness varies significantly between and within families and is influenced by the culture, age, and stage of life of the family members. Olson and Gorall presented a continuum for family cohesion, ranging from *enmeshed* (very high), to *very connected* (moderate to high), to *connected* (moderate), to *somewhat connected* (moderate to low) to *disengaged* (very low). An enmeshed style of interaction is characterized by over-identification with the family, resulting in extreme levels of consensus and limited individual autonomy and independence. Disengaged families are marked by high autonomy and low bonding, in which there is little attachment to the family system. Family functioning is enhanced when there is a balance between enmeshment and disengagement.

### Family Involvement

Affective involvement, as defined by Epstein and colleagues, refers to the extent to which family members value and display interest in the activities of other family members. An emphasis is placed on the amount of interest as well as the manner in which family members demonstrate their interest and investment in each other. Involvement exists on a continuum, ranging from *lack of involvement* to

*over-involvement*. The optimal level, *empathetic involvement*, refers to a genuine interest; family members are invested for the sake of others in the family unit. The development of healthy functioning in families is enhanced through empathetic family involvement practices.

### Family Adaptability/Flexibility

Every family faces situations throughout the course of life that present challenges to the manner in which family members relate to one another or how the family unit functions within the community. *Family adaptability* or *flexibility* refers to a family's ability to modify its rules, roles, and leadership; thus, restoring balance between: a) family members and the family unit; and b) the family unit and the community. Olson and Gorall indicated that families have differing degrees of adaptability falling along a continuum from *rigid/inflexible* (extremely low) to *somewhat flexible* (low to moderate) to *flexible* (moderate) to *very flexible* (moderate to high) to *chaotic/overly flexible* (extremely high). Similar to the construct of family cohesion, moderate, degrees of adaptability (e.g., structured or flexible) may allow for healthier degrees of family functioning than those on the extremes (e.g., rigid or chaotic).

To function as a healthy system, families must be both adaptive and stable. The ability to determine when it is appropriate to maintain stability or address change is a characteristic of healthy, functional families. Such families are both proactive in the development of individual family members and also understand the importance of maintaining the family unit.

### Parenting Styles and Problem-Solving Processes

Family functioning is related to the family's communication and problem-solving skills. Communication styles associated with healthy family functioning include clear, direct, and honest communication, active listening, and positiveness. Walsh reported that family functioning benefits from collaborative problem-solving that includes shared decision-making among family members, is goal-oriented, follows concrete steps, and builds on successes.

The interactions between parents and children often serve as a model for the family's overall style and ability to communicate and problem-solve. Authoritarian, permissive, and authoritative represent three distinct styles of parenting outlined by Baumrind. The *authoritarian parenting style* is marked by high levels of authority and control, with limited negotiation regarding standards of behavior. In contrast, *permissive parents* allow children to regulate their own activities, standards and rules, with few decisions imposed by caregivers. *Authoritative parenting*, considered the optimal parenting style for healthy family functioning, is marked by a balance between freedom and responsibility. Parents adopting this style engage family members in problem-solving processes to negotiate compromise and manage conflict.

## Shared Beliefs and Values

Another important component for the development of healthy family functioning is the establishment of a shared belief system. Shared values and beliefs are essential for family resilience and reinforce specific patterns regarding how a family reacts to new situations, life events, and crises. Walsh states that a common belief system assists families in making meaning of crisis events and facilitates hope and a positive outlook. The concept of shared beliefs, values and expectations appears in the literature under similar constructs, including family schema, family world view, and family coherence.

A strong family schema represents a belief in the family unit that views its interactions with the world from a collective “we” versus “I” orientation. Families with a strong schema, as discussed by McCubbin and colleagues, are likely to perceive life in a realistic manner and not expect perfect solutions to difficulties that life presents.

## Measuring Family Functioning

When adopting a systems perspective, it is often necessary to evaluate multiple aspects of how a family operates with a variety of techniques. Methods of evaluating family functioning include family member self-report measures, observation of family interactions, and clinician rating scales.

There are several methodological issues that have been raised in regards to conducting assessments of family functioning. First, how one approaches measuring family functioning differs based on one’s definition of the construct. Critics of family assessment measures point out that existing measures do not always provide an adequate link between assessment and family theory. Second, there is debate as to whether a holistic assessment of family functioning needs to be conducted or if evaluating partial components suffice. A related issue is whether an adequate representation of a family’s functioning can be assessed by information from only one or a few family members. Third, not all measures of family functioning have demonstrated adequate levels of internal and external validity or reliability.

Commonly used measures of family functioning include the McMaster Family Assessment Device (FAD), Family Adaptability and Cohesion Scales (FACES IV), Family Environment Scale (FES), Parenting Stress Index (PSI), Self-Report Family Inventory, Family Functioning Style Scale, Family Functioning Scale (FFS), and the Family Hardiness Index (FHI).

## Future Directions

Future directions in the area of family functioning should focus on developing a unified theory and definition of the construct, enhancing the psychometric and

methodological properties of family functioning assessment tools, increasing the clinical utility of assessment measures, and aligning evaluation measures with existent theory. Further, theories and models of family functioning should incorporate the changing ethnic and cultural landscape of society. Most current models and theories are based on a white, middle-class family structure and orientation. Assessment measures or procedures that address family functioning should be developed that are sensitive to nontraditional family structures (e.g., single-parent or blended families) and ethnic, cultural, and socioeconomic characteristics of families.

SEE ALSO: ► Effective parenting ► Family quality of life ► Fatherhood  
► Motherhood

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## Family Quality of Life

Ann P. Turnbull and Jean Ann Summers  
*University of Kansas*

*Family quality of life* in the field of developmental disabilities is defined as:

- the degree to which family members' needs are met;
- the extent to which they enjoy their time together; and
- the extent to which they are able to do the things that are important to them.

From a historical perspective, two lines of research were especially influential in producing an emphasis on family quality of life in the developmental disabilities field.

First, the construct of family-centered services has been prevalent in the disability field since the mid-1980s. It is based on the ideas that: a) children and adults with disabilities are best served in the context of their families; and b) all members of the family are affected by the disability of one of its members and deserve services and supports. The key dimensions of family-centered services include:

- family choice – changing the power relationship between professionals and families;
- family strengths perspective – focusing on family assets and resources; and
- family as the unit of support – providing support to the whole family rather than only the child with a disability.



The family-centered service philosophy focuses on *how* services are delivered to families. Especially during the last five years, the call for greater accountability in service programs has led to a greater emphasis on outcomes as contrasted to processes. Thus, research and recommended practice has moved from an emphasis on *how* services are delivered (in a family-centered way) to *what differences* services make to the lives of families. This focus on outcomes has pushed the field to the conceptualization and measurement of family quality of life outcomes.

Second, within the field of developmental disabilities, there has been a focus on the quality of life of individuals with disabilities over the last decade. An international team of researchers synthesized research related to individual quality of life in terms of its conceptualization, measurement, and application. This team identified core principles of individual quality of life as being multi-dimensional, being influenced by those personal and environmental factors, and composed of the same factors for people with disabilities that are important to people without disabilities.

Some of the researchers who were part of the international research team on individual quality of life were early contributors to the conceptualization of family quality of life. Based on in-depth discussions of a three-country (Australia, Canada, and Israel) research team and a review of family research, these researchers identified nine domains of family quality of life: health; financial well-being; family relationships; support from other people; support from disability-related services; spiritual and cultural beliefs; careers and preparing for careers; leisure and enjoyment of life; and community and civic involvement.

At the same time, another team in the United States produced a second conceptualization of family quality of life, which will receive primary emphasis in the rest of this entry. This model evolved from an extensive qualitative and quantitative research program at the Beach Center on Disability. Research included responses from mothers, fathers, individuals with a disability, siblings, service providers and administrators from approximately 12 states. The research focused on identifying domains and indicators of family quality of life from qualitative inquiry to serve as a basis for a measure of family quality of life, which was then confirmed and refined in a series of national field tests.

## Aspects of Family Quality of Life

The Beach Center's research confirmed the following five domains of family quality of life: parenting; family interaction; emotional well-being; physical well-being; and disability-related support.

Family interaction is characterized by relationships family members have with each other and the relational environments within which they interact. The indicators include enjoying spending time together, talking openly with each other, showing love and care for each other, solving problems together, and supporting each other to accomplish goals. *Family* is defined as including the people who

think of themselves as part of the family, whether related by blood or marriage or not, and who support and care for each other on a regular basis. This means that family interaction might include long-term partners not related by blood or marriage, care providers of family members who have extensive needs, and god parents who are significantly involved in providing regular supports. This definition of family contrasts with the Census definition that defines family as a group of two or more people related by birth, marriage, or adoption who reside together.

The domain of parenting focuses on those activities that adult family members do to help children grow and develop. Parenting indicators include the family's capacity to help children with school work and activities, teach social skills, help children become independent, and address the individual needs of every child. The parenting function might be carried out by biological parents, foster parents, grandparents, or other adults within the family.

*Emotional well-being* is the domain of family quality of life involving the feelings or affective considerations within the family, as well as the emotional capacity of family members to deal with challenges. These indicators include having the support needed to relieve stress, having friends or others who provide support, having time to pursue individual interests, and having outside help available to take care of the special needs of all family members.

*Physical/material well-being* addresses resources (e.g., financial, health-related) that families need in order to meet their members' needs, in addition to the physical contexts in which they live. Key indicators include having a way to take care of expenses, having transportation, feeling safe across different environments and getting medical and dental care when needed. Clearly with the high rate of poverty among families in today's society, physical/material well-being is an important consideration.

Finally, the last domain is *disability-related support* which addresses the specific supports and services from family members, friends, community members, and professionals to meet the particular needs of the family member with a disability. Indicators of disability-related support include achieving goals at work or school, having a good relationship between the family and service provider, making progress at home, and making friends. Given that the research used, to develop the conceptualization and operationalization of family quality of life, was done within the field of developmental disabilities, it is not surprising that a domain of the conceptualization focuses on disability-related support. Types of special needs for other families might include aging parents, family members with chronic illness, or other types of chronic caregiving considerations. Beach Center researchers made the decision, consistent with the psychometric data, to pull disability-related items into one domain. This configuration enables this conceptualization to still apply to families who do not have a member with special needs by deleting this domain and keeping the four other domains that have universal application.

## Measuring Family Quality of Life

The Beach Center Family Quality of Life Scale (FQOL Scale) assesses families' perceptions of importance of and satisfaction with the previously identified five domains of family quality of life. The FQOL Scale is a self-report instrument comprising of 25 items that are rated on a Likert-like scale ranging from 1–5. It was specifically developed for families who have children and youth (ranging in age from birth to early twenties) with various disabilities, including a range of types and severity levels. Psychometric characteristics are satisfactory. As addressed previously, the FQOL Scale can be used with families who do not have children with disabilities by deleting the items related to the factor of disability-related support.

Several measurement issues related to family quality of life still need to be addressed. A key issue is how to best formulate a family score as contrasted to the score of one family member who completes the scale (to date in most research, mothers have been the respondents). An alternative for family quality of life measurement is for one family member to rate the extent to which she or he perceives that the *family* as a whole is satisfied with various indicators. Another alternative is the extent to which all family members report their perception about the family's well-being and those scores are aggregated. A third alternative is for each family member to report on his or her own *individual* perception of his or her own family quality of life as it contributes to the larger family unit, with the use of more sophisticated statistical modeling (e.g., structural equation modeling) to determine the contribution of each family member to an overall level of family quality of life. In preliminary work, it appears that fathers and mothers tend to view the relative importance of aspects of family quality of life in the same way, which suggests that, at least for the parents in the family, it will be possible to measure the perspectives of different family members using the same scale.

## Family Quality of Life as an Outcome for Programs and Policies

In addition to using the FQOL Scale for research, it has also been used in programs that provide services to families of children with disabilities. Within a programmatic context, it can be used for individual program planning and for program evaluation.

In terms of individual program planning, the FQOL Scale can be used with families as a written survey or a conversation guide in gaining information to plan individual support programs. In terms of planning services, it can be completed by only one family member, or it can be completed by every family member and the focus of services can be on finding the common strengths of families on which to build and the common needs of families for which additional support is needed.

For a focus on program monitoring/enhancement, family support programs can use the FQOL Scale to gather information from all families about what is important to them and the extent to which the program provides adequate support for each of the indicators. By having all families who receive services complete the survey, program administrators will have useful information on where to focus program resources in order to address the priorities of the greatest number of families. Such program information leads to the identification of program strengths in areas for program enhancement.

Another use of the FQOL Scale is for professionals who provide family services to complete a professional version in order to identify their own beliefs about what is important to provide to families in order to improve their quality of life and also the extent of their satisfaction with their own performance and/or the program's performance in providing these supports. A comparison of family and professional perspectives will enable program administrators to determine if these two stakeholder groups share similar perspectives and values related to the importance of family quality of life indicators and satisfaction that the program is adequately addressing these indicators.

Aggregate program information can, in turn, be used by a participatory team of families, program administrators, service providers, and community leaders to provide direction for the development of agency action plans to enhance the quality and quantity of family supports consistent with families' priorities. By continuing to use the FQOL Scale, programs can monitor their progress in enhancing their services in order to have enhanced family quality of life outcomes.

SEE ALSO: ► Familism ► Well-being

## **Fatherhood**

Matt Englar-Carlson

*California State University, Fullerton*

Fatherhood in the United States is the focus of widespread scholarly and popular attention. The emphasis on fathers is important because according to the United States Census Bureau, 66.3 million adult men (out of 108 million men) are fathers, and the majority of men younger than 55 years have children in their homes. Like other social institutions, the role and expectation of fathers have changed over time. Much of the attention on fatherhood is driven in part by social and cultural changes in the image of fathers but also because many men are fathering differently than previous generations of men. In response to these changes, the notion of fatherhood shifted in how men and society view the effects of men in the raising of children. In the 1950s and early 1960s, popular culture reflected sociological reality by exalting the virtuous father as the financial support for the family and the disciplinarian to his children, while the father's role as a source of

emotional support was downplayed. As women's participation in the labor force has increased and some of the rigid cultural ideas about gender stereotypes have weakened, the extent and expectation of father involvement and responsibility in childcare has changed. The primary emphasis on fathers as the "good provider" has expanded to adapt to the changing needs and roles with the contemporary family. Societal depictions and perceptions of fathers now include men not only as inherently nurturing, but also as competent in a nurturing role. Though for many men the traditional role as economic provider is a significant portion of a fathering identity, there is evidence to suggest that fathers are more emotionally connected to their children. Further, many fathers report a desire to be more involved with the caregiving of children and perceive social expectations that they do so.

For many twenty-first-century fathers, the acceptance of new familial and relationship roles is of particular salience as the traditional paternal breadwinner role appears less entrenched in today's modern family. Replacing this notion is a new focus on the father as involved, available, and as the equal coparent. Socio-cultural factors such as increasing rates of mothers entering the workforce and the shifting structure of American families from predominantly married, two-parent households to a variety of family compositions, ranging from single-parent households to nonmarried, two-parent households, may be contributing to the evolution of new fathering behaviors and roles. Many fathers are spending more time with their children, assuming an expanding variety of childcare tasks, and filling new paternal roles such as the primary caregiver as a "stay-at-home" dad.

Fatherhood itself has been described as a socially constructed role that mirrors the definition and ideas of a particular culture and society. Due to pluralistic realities in contemporary society, a degree of uncertainty remains about the definition of the *ideal* father. The importance of the family and the nature of the fathering role are likely to vary across racial and ethnic groups. Despite these variations in definitions and the meaning of fathers, considerable scholarly research has moved beyond rigid notions of fathers and men as solely financial providers or secondary to mothers in the lives of their children and shown that fathers care and contribute positively to their children, wives, and partners.

Historically, psychologists focused on the alleged inadequacies of fathers as parents. Many behavioral scientists prior to the 1960s and 1970s assumed that fathers were relatively unimportant in the development of their children because children spent most of their time with mothers. Fortunately, over the past several decades, many psychologists who study child development and family relations have shifted their perspectives on father-child relations in a positive direction. For example, in the 1970s, Michael Lamb and his colleagues started a new trend of organizing findings from emerging research documenting that fathers contribute to their children's development in beneficial ways. Lamb's classic volume on the subject, *The Father's Role in Child Development*, is now in its fourth edition. Similarly, Hawkins and Dollahite and their associates have devoted considerable attention to the ways that fathers care for the next generation through positive father work.

*Generative fathering* is used to describe fathering that responds readily and consistently to a child's developmental needs over time. Dollahite and Hawkins (1998) described generative fathering as "a non-deficit perspective of fathering rooted in the proposed ethical obligation for fathers to meet the needs of the next generation" (p. 110). The model builds on Erikson's concept of generativity in lifespan developmental theory and also incorporates a contextual emphasis, suggesting that good fathering is "generative work." Fathering thus becomes a way for men to provide for and protect their children but also a means to contribute to the development of a new generation of men. Being a "good" father becomes an important aspect of identity for many men and a way of contributing to social welfare.

## **The Benefits of Father Involvement in the Lives of Children**

Father involvement is strongly associated with significant childhood social, emotional, and cognitive outcomes while also influencing positive school outcomes. Father involvement has been defined having three components: *engagement*, *accessibility*, and *responsibility*. These definitions of father involvement cut across notions of face-to-face engagement to include some of the managerial functions of parenting. Engagement refers to the father's direct contact, caregiving, and shared interactions with his child. Accessibility refers to the father's potential availability and presence to his child, regardless of the actual interactions between father and child. Responsibility refers to the role of the father as making sure that a child is taken care of and arranging for resources to be made available to the child. Responsibility can mean financial resources, but also a father's participation in tasks such as doctor's visits and making appointments, selecting childcare settings and babysitting, arranging afterschool care and meeting with school personnel and staff, taking care of sick children, and monitoring a child's location and whereabouts. Some evidence suggests that responsibility may be the most important component of father involvement. Yet for many fathers, financial child support remains an important form of parental responsibility.

For fathers to be effective, just being around a child is not enough, as responsible fathering is about being involved and available. Father involvement tends to have the most beneficial effects when the father-child relationship is supportive. Responsive fathering (i.e., warmth, attentiveness, sensitivity) and participation during specific engagements with children are important. Responsive father involvement significantly affects children's overall well-being. Fatherhood researcher Lamb (1986) is clear in his summary of father involvement: "Children seem better off when their relationship with their father is close and warm" (p. 12). This is true for resident biological fathers, stepfathers, nonresident fathers, and father-figures.

It is important to make the distinction between quantitative and qualitative experiences of father involvement. Empirical research clearly indicates that the quality of father-child involvement is more important than the actual amount of

involvement. Many of the positive mental health and overall well-being outcomes of father involvement are lifelong. Father involvement not only contributes to children's academic achievement, but also mediates the negative association found between low-income and academic attainment. When fathers assume an active and responsive role in raising children, this involvement appears to enhance their children's growth and development. A father's emotional investment in, attachment to, and provision of resources for his children are all associated with the well-being, cognitive development, and social competence of young children.

Interestingly, the meaning and practice of fatherhood are related to men's experiences with their own fathers. Men whose fathers were involved in raising them tend to be more involved with their own children, take more responsibility with their own children, show more warmth, and closely monitor behavior and activity. Further, previous caretaking and childcare experiences seem to prepare fathers to be more involved. Fathers with more gender-equitable attitudes and experiences in their own childhood with nongendered stereotyped tasks tend to be more active, responsible, and warm.

Fathers have also been found to play a significant role in the development of children's emotional regulation and control. Attachment theorist John Bowlby posited that fathering involved a greater emphasis on play, mentorship, and encouragement of a child in the face of challenges. Fathers often provide their children with the freedom to explore and promote active and physical play. This form of play can teach children self-control, social cues around managing emotions and recognizing other's emotional cues, and understanding drawing limits in terms of learning that kicking, biting and other forms of physical violence are not acceptable. Parenting researcher John Gottman noted that during these activities, fathers can positively influence the emotional lives of children by validating feelings and recognizing and praising accomplishment.

Fathers play distinct and complementary roles with mothers. Fathers often have the ability to draw out an infants' emotional expression across a wider scale of intensity that helps a child learn to tolerate the range of people and situations. This is achieved through playing games (often physical games) in which both father and child become enthralled in the intensity of the experience. Fathers also can serve as a sensitive, supportive, and gently challenging companion for children in their attempts to move beyond the family in exploring the world. Thus fathers may play an important role in fostering the skills and behaviors children need to be successful in contexts outside of the family, such as in schools with peers and teachers.

## **How Does Fatherhood Affect Fathers?**

Whereas much of the research on fathers has looked on the effects of fathers on children, becoming a father clearly has consequences for men and affects their lives. Strong evidence indicates that fathers differ from nonfathers in their social

connectedness, family relationships, and work behavior. Traditionally, work roles have been viewed as central to men's psychological health, as the workplace was understood as the setting where men established their identities and developed self-worth. Recently, however, some research has challenged these notions and looked at the importance of the parental role for men. Happiness, satisfaction in life, and subjective well-being may be rooted in the parental roles of men rather than in the work role. Most of the empirical research on fathers, which is mainly focused on normatively timed fatherhood, finds fatherhood experiences to be positive in a man's life.

It has been suggested that being a father affects a man's health in a bidirectional way: fathers affect children's health and children may affect a father's health. Children may affect fathers by their very presence in a man's life. Positive effects might be children as a source of happiness, increased physical activity, and providing a sense of accomplishment, well-being, and contentment for fathers. Having children and providing financial and emotional support for them affects the relationships between a father and his partner, and thus affects the health benefits of that relationship. Some evidence suggests that men who are fathers have less psychological distress, so that emotional involvement with children acts as a buffer against work-related stress. Specifically, fathers who have the fewest worries about their relationships with their children also tend to have the fewest health related problems.

The timing of fatherhood often determines the path that fathering takes as age, life-style, occupation, and education are important determinants of father involvement and the experience of being a father. For example, the transition to parenthood for adult males is often less difficult than the transition to parenthood for adolescent males who take more of a crisis view of a child's impending birth. For younger men, having a child is often unintentional, whereas for older men, having a child is often a planned or intended event. A father's positive parenting has been shown to be linked to whether or not a pregnancy was intended. Further, men whose fathers were involved in raising them have been found to be more involved with their own children, take more responsibility, show more warmth, and closely monitor the children's behavior and activities.

Becoming a father often leads men to change their own unhealthy behavior. Fatherhood may act in similar ways to marriage by reducing health-risk behaviors (e.g., smoking, alcohol use, dangerous activities). Fatherhood may serve as a signal to men that they have someone to live for, thus encouraging more healthy and responsible behaviors. Further, the presence of children in a man's life often encourages men to become more involved in community and service-oriented organizations, establish more frequent contacts with extended kin, get more involved in church and faith-based community activities, and show greater attachment to their jobs or career. In this capacity, fathers often find their social capacity changes to less time with friends and associates and more time in social relationships that directly or indirectly include one's children. Fatherhood seems to promote a man's ability to understand himself as an adult and thus develop empathy and learn to care sympathetically for others. As fathers age, they grow into roles as community



leaders and mentors so that they become more concerned with the next generation of men. This is another example of generative fathering.

The benefits of involved fathering can last a lifetime. Most of the research on fatherhood and fathering seems to overlook that men remain fathers even after their children reach adulthood. In the transition to parenthood, some fathers initially experience a decline in marital satisfaction, stress, and other ills. However, over time fatherhood has been shown to increase marital stability and competent fatherhood has been associated with marital satisfaction in midlife. In addition, research has indicated that a father's involvement in raising child during the first two decades of a child's life is most predictive of occupational mobility later in life more than any other factor. It appears that involved fathers tend to have happier relationships and more successful careers.

SEE ALSO: ► Effective parenting ► Family functioning ► Family quality of life ► Motherhood

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## Five Factor Model

Angelina R. Sutin and Paul T. Costa

*National Institute on Aging, National Institute of Health*

The five factor model is an empirically based conceptual description of the hierarchical structure of human personality. At the top level are five major personality traits, colloquially known as the Big Five: openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism. A useful mnemonic is OCEAN, which also conveys the global importance and coverage of the five factor model. These five trait dimensions specify the most basic individual differences in people's thoughts, feelings and behaviors. An individual's standing on each factor describes the person's typical experiential, motivational, interpersonal, attitudinal and emotional styles.

Personality traits describe differences between people that are stable over time and across situations. These traits are considered dimensions, not types, which means that an individual can vary anywhere between the two poles, with most people falling somewhere in between the two extremes. For example, an individual is not either introverted or extroverted, but rather has some degree of extroversion.

Every person, regardless of gender, race, class, or ethnicity, can be described by their standing on these five traits.

## Five Factor Model of Personality Traits

The five factor model of personality traits are typically defined as follows:

- *Openness to experience* refers to the extent to which the individual is imaginative and creative versus down-to-earth and conventional. Open people appreciate art and beauty, have a rich emotional life, and are intellectually curious. Closed people tend to be conservative, resistant to change, and prefer familiarity to novelty.
- *Conscientious* people tend to be achievement-oriented, hard-working, reliable, and organized. People low in conscientiousness, in contrast, tend to be disorganized, have difficulty planning ahead, and may have little ambition or direction in achieving their goals.
- *Extroverted* people are highly engaged with the external world. They enjoy being around others and are talkative, cheerful, and tend to experience positive emotions. Introverts, in contrast, need less stimulation from the external world. They tend to be quiet, reserved, and prefer to be alone or with a small circle of close friends. Low extroversion people are less prone to feeling positive emotions; this does not mean, however, that they are more prone to feeling negative emotions.
- *Agreeable* people are friendly, generous, cooperative, compassionate, and have an optimistic view of human nature. Disagreeable people are focused more on their own self-interests than on getting along with others. They tend to be skeptical of others, suspicious, and antagonistic.
- People high on *neuroticism* are prone to negative affect, such as anxiety and depression. They tend to experience even mild frustrations as hopelessly difficult and threatening. People low on neuroticism are emotionally stable, well-adjusted, and less emotionally reactive than highly neurotic people. Low neuroticism people are less prone to feeling negative emotions; this does not mean, however, that they are more prone to feeling positive emotions.

Personality is organized hierarchically; under each of these five broad dimensions are six sub-traits, or facets. Facets under openness to experience include fantasy, aesthetics, feelings, actions, ideas, and values. Conscientiousness is composed of competence, order, dutifulness, achievement-striving, self-discipline, and deliberation. Extroversion facets include warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions. Under agreeableness are the facets of trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. Finally, neuroticism facets include anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability.

Each set of six facets collectively contribute to the corresponding broad factor. For example, people who experience positive emotions are often also warm and gregarious. Thus, these facets are aggregated into the higher-order factor of extroversion. Although the facets that comprise each factor are related, they contribute distinct information about the person. Many of these facets are ideal for studying human growth and potential.

Several features characterize each of the five traits and their facets. First, the traits are relatively stable across the lifespan. Although the actual level of a trait might change over time, an individual's standing on a trait relative to another person tends to remain the same. For example, if Mary scores higher in neuroticism at age 30 than Ted, Mary is likely to be more neurotic than Ted at age 40, even if both of them score lower on neuroticism at age 40 than they did at age 30. Second, the traits pervade psychological theories and the lay vocabulary alike. Third, behavioral genetics research shows that the broad traits and their facets are heritable, indicating that personality has a strong genetic basis. Finally, cross-cultural studies have found the same five factors in diverse cultures around the world, suggesting that the five basic traits are universal.

## Historical Background and Development of the Five Factor Model

Dating back to at least Hippocrates' (400 BC) classification of people into four humors (sanguine, choleric, melancholic, phlegmatic), philosophers have attempted to describe and classify differences between people. The rigorous, scientific study of individual differences in personality, however, did not emerge until the 1930s. Allport and Odbert started with the hypothesis that differences between people are reflected in the natural language that we use to describe people. They found over 18,000 words in the dictionary related to personality; 4,500 of these words described observable, stable traits. Over the next several decades, researchers used statistical techniques, such as factor analysis, to group similar descriptive adjectives into higher-order factors. For example, words such as moody, temperamental, and anxious tend to go together and describe someone who is high on neuroticism. Research based on this approach has consistently found that five personality factors emerge from the words that describe differences between people.

The approach to personality used by Allport and Odbert is known as the lexical hypothesis. Many contemporary personality researchers (e.g., Goldberg and Saucier) have adopted this approach, and there have been attempts to explain and integrate findings from the personality literature. In particular, the five factor theory, described by McCrae and Costa in the 2003 book, *Personality in Adulthood: A Five-Factor Theory Perspective*, is a theoretical account of the structure, cause, and consequences of the five factor model of personality traits. In addition to describing the structure of personality, the five factor theory addresses issues of constancy and change in personality over the life span.

The five factor theory situates personality traits in a comprehensive model of genetic and environmental contexts. The theory posits that personality traits are genetically based, biological dispositions known as basic tendencies. Through interactions with our environment, basic tendencies give rise to our characteristic ways of thinking, feelings, and behaving. We can measure these characteristic adaptations as indicators of our underlying basic tendencies.

## Measurement

The NEO-Personality Inventory-Revised (NEO-PI-R) is perhaps the most comprehensive measure of personality traits. This 240-item personality measure assesses both the five broad personality traits and the six subordinate facets within each of the five broad traits, thus capturing the hierarchical structure of the five factor model. Respondents respond on a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. Normative data was published by Costa and McCrae and is available in the 1992 *Professional Manual for the Revised NEO Personality Inventory (NEO-PI-R)*. In addition to self-ratings, other people who know a person well, such as relatives, friends, or coworkers, can make valid observer ratings of the person's personality.

## Relevance to Positive Psychology

Unlike Freud's theory of personality, which developed, in part, to explain psychopathology, the five factor model developed agnostic to either valence of human functioning. As such, the five factor model provides a framework for studying optimal human functioning in the context of personality.

Both the broad factors and many of the lower-order facets can be used to study human potential – both intrapersonally and interpersonally. Intrapersonally, many of the facets specifically refer to positive qualities within the individual. For example, the facets of openness to experience measure the individual's propensity for fantasy, aesthetics, feelings, actions, ideas, and values. Interpersonally, the facets of agreeableness have to do with positive interactions between people: trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. For example, the facet of altruism refers to the individual's propensity to be concerned with others' welfare, exemplified by their willingness to help other people in need without expecting anything in return.

All five personality traits have been associated with positive outcomes, such as happiness and coping. Happiness is often thought of as the consequence of the individuals' perceptions of their life, rather than their actual quality of life. As such, psychological well-being can be characterized by an individual's personality traits. Individuals high in extraversion and low in neuroticism are the most sensitive to positive emotions, such as happiness, and the least sensitive to negative emotions, such as sadness. Likewise, individuals high in neuroticism and low in extroversion

are the most prone to depression. Individuals high in openness to experience tend to experience a wide range of emotions, both positive and negative. Finally, agreeableness and conscientiousness have also been linked to happiness: agreeableness because agreeable people tend to have more satisfying interpersonal relationships and conscientiousness because conscientious people tend to achieve their goals.

As another example, personality is also associated with an individual's style of coping. Individuals high in neuroticism tend to use immature coping strategies, such as indecisiveness and self-blame. In contrast, individuals high in extraversion tend to use the most mature coping strategies, such as positive thinking and restraint. Both high and low openness are related to positive coping strategies: open people rely on humor, closed people rely on faith. High agreeable people use self-sacrificing defenses and rely less on image-distorting defenses. Finally, conscientiousness is related to the use of mature coping strategies such as getting motivated to achieve goals even in the face of stress.

## Summary

The five factor model of personality describes the structure and interrelations among the basic five personality traits. These five traits and their facets, individually and in combination, offer a well-grounded framework for studying the positive dimensions of human personality. The wide-range of real-life outcomes indicates the utility of this approach, particularly for positive psychologists interested in individual differences in human growth and potential.

SEE ALSO: ► Agreeableness ► Allport, Gordon W. ► Conscientiousness  
► Personality

## Flourishing

Barret Michalec, Corey L. M. Keyes, and Sonal Nalkur

*Emory University*

Flourishing is a state of positive mental health. Not only are flourishing individuals free of mental illness, they are also filled with emotional vitality and function positively in both private and social realms of their lives.

## Prelude to the Study of Human Flourishing

The study of human flourishing reflects a shift in mental health research. Towards the end of the twentieth century, researchers issued a call for a more balanced approach to mental health inquiry and measurement, suggesting that prominent

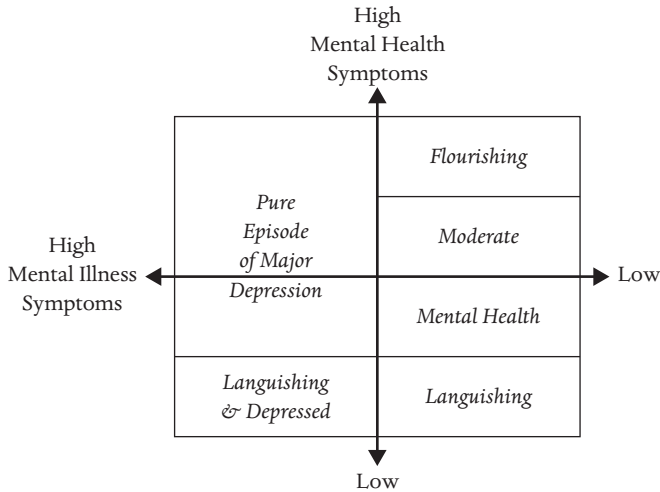
mental health models have actually defined and diagnosed psychological and emotional health as the absence of psychopathology and mental disorders. The pioneers of the mental health model, however, argue that a state of psychological health means not only that there is the relative absence of negative symptoms but that positive elements of life such as the feeling of leading a meaningful and purposeful life as well as having quality ties to others are also reported.

Although the belief that the pursuit of one's personal goals can lead to individual and social well-being can be traced back to John Stuart Mill's work on the *Greatest Happiness* principle, some have said that the recent shift in mental health perspectives best echoes the early views of Erik Erikson, Eric Fromm, and Marie Jahoda who recommended that mental health represents aspects of love, creativity, autonomy, enjoyment of work and play, as well as self-acceptance. With the advancement of psychodynamic and psychoanalytic perspectives, behaviorism, and stress theory, mental health inquiry appeared to turn more towards the negative aspects of psychological states such as disorders, illness, and other abnormalities in terms of their predictors, determinants, as well as their plausible treatments.

Similarly, the primary instrument used to measure mental health, the *Diagnostic and Statistical Manual* (DSM), first appearing in 1952, was constructed to recognize and assess psychological disturbances, further spotlighting the focus on mental illness. Believing that there was more to subjective well-being than the absence of negative symptomatology – i.e., in the form of emotional, psychological, and social well-being – researchers later in the century began investigating the positive aspects of social life that created beneficiary preventative and promotive qualities for individuals.

## **Measuring Human Flourishing**

Arguing that mental health and mental illness are not merely opposite ends of one single measurement continuum, Corey Keyes and others propose that mental health should be viewed as a complete state consisting of two dimensions: the mental illness continuum and the mental health continuum. Furthermore, symptoms of mental health consist of an individual's subjective well-being, which in turn reflects their perceptions and evaluations of their lives in terms of their affective states and their psychological and social functioning. The instrument utilized by the mental health model represents a classification of mental health symptoms consisting of emotional well-being (i.e., measures of positive affect, happiness, and life satisfaction), functional psychological well-being (i.e., measures of self-acceptance, personal growth, purpose in life, environmental mastery, autonomy, and positive relations with others), and functional social well-being (i.e., measures of social acceptance, social actualization, social contribution, social coherence, and social integration). In the same way that depression is characterized by symptoms of anhedonia, mental health, according to proponents of this perspective, is proposed to consist of symptoms of hedonia, or emotional vitality and positive feelings towards one's life.



**Figure 3** The Complete Mental Health Model and Diagnostic Categories.

To flourish means to thrive, to prosper, and to fare well in endeavors, qualities that the subjective well-being measure attempts to capture. To be diagnosed as “flourishing” in life, individuals must exhibit high levels on one of three scales of emotional well-being and high levels on six of eleven scales of positive functioning. Flourishing is not only distinct from psychopathology, but also from *languishing*: a state in which an individual is devoid of positive emotion toward life, is functioning poorly psychologically or socially, and has not experienced depression in the past twelve months. In short, languishers are neither mentally ill nor mentally healthy. To be diagnosed as languishing in life, individuals must exhibit low levels on six of the eleven scales of positive functioning. The complete mental health model suggests that classifications of individual’s psychological well-being are (from low to high levels of mental health): mental illness and languishing, pure mental illness, pure languishing, moderately mentally health (i.e., neither flourishing nor languishing), and completely mentally healthy (i.e., flourishing). As shown in Figure 3, each dimension respectively ranges from a high to a low level of symptoms of mental illness and mental health.

## Flourishing in the United States Population

In a national probability sample of adolescents between the ages of 12 and 18, research has shown that flourishing youth reported lower levels of deviance and conduct problems and higher levels of psychosocial assets than moderately mentally healthy or languishing youth. In particular, flourishing youths reported lower rates of having ever been arrested, having ever skipped school, smoking cigarettes or, in the past month, having smoked cigarettes, smoked marijuana, drank alcohol, or sniffed inhalants than moderately mentally health youths, who in turn reported

lower rates than languishing youths. Similarly, flourishing youths scored higher on scales measuring positive self-concept, self-determination, integration into school, and closeness to others than moderately mentally healthy youths, who scored higher than languishing youths.

In adults between the ages of 25 and 74, research has also shown that flourishing is an asset for human development, while moderate mental health and languishing are human development liabilities. Recent studies have revealed that completely mentally healthy adults – individuals free of a 12-month mental disorder and flourishing – report the fewest missed days of work, the fewest half-day or greater work cutbacks, the healthiest psychosocial functioning (i.e., low helplessness, clear goals in life, high resilience, and high intimacy), the lowest risk of cardiovascular disease, the lowest number of chronic physical diseases with age, the fewest health limitations of activities of daily living, and lower healthcare utilization.

Estimates of the population prevalence of categories of the mental health continuum suggest that flourishing is uncommon in adults. That is, only 18% of adults between the ages of 25 and 74 fit the criteria for flourishing. Instead, most adults, 65%, were moderately mentally healthy, while 17% were languishing. In contrast, flourishing is more common in adolescents. Between the ages of 12 and 18, 38% of youth were flourishing, 56% were moderately mentally healthy, and 6% were languishing.

SEE ALSO: ► Mental health ► Mental illness ► Psychopathology  
► Psychological adjustment ► Well-being

## Flow

Mihaly Csikszentmihalyi

*Claremont Graduate University*

*Flow* is a subjective state people report when they are completely involved in something to the point of forgetting time, fatigue, and everything else but the activity itself. It is what one feels when reading a good novel, or playing a good game of tennis, or when having a stimulating conversation. The defining feature of flow is intense experiential involvement in moment-to-moment activity, which can be either physical or mental. Attention is fully invested in the task at hand, and the person functions at his or her fullest capacity. It is a state often reported by athletes and artists, but also by people involved in everyday activities. For instance Mark Strand, former Poet Laureate of the United States, in an interview described this state while writing as follows:

You're right in the work, you lose your sense of time, you're completely enraptured, you're completely caught up in what you are doing . . . when you are working on something and you are working well, you have the feeling that there's no other way of saying what you're saying. (Csikszentmihalyi, 1996, p. 121)



## Historical Background of Flow

The fact that many people invest a great deal of energy doing things for which they receive no obvious benefits has been difficult to explain in terms of the psychological theories that held sway during most of the past century. Because behavior was seen to be motivated by external and/or internal stimuli beyond the individual's control, it was difficult to explain why some risked their lives climbing mountains, or why others spent all their free time playing chess or playing the guitar. Very convoluted explanations had to be advanced to save the accepted theories (e.g., chess players were re-living Oedipal fantasies of killing their father when they check-mated the opponent's king; or they were preparing themselves for the future by learning rational strategies; or they were introverts who found a socially acceptable escape from sociability in the game). Of course, while all of these reasons to play chess may hold some truth, the main reason was not visible to those who used behaviorist or psychoanalytic theories. Even though the enjoyment of those who played games, sport, music, and so on, were obvious for anyone to see, they were invisible if you assumed that every human activity was motivated by only a few hidden needs.

This situation began to change in the middle of the twentieth century. Ironically, it was animal behaviorists who began to notice that rats would explore their mazes even when not motivated by hunger, and monkeys manipulated objects in their environment even when they were not rewarded for it. Perhaps curiosity, interest, or the pleasurable sensation an organism experiences when functioning at its best are also sources of motivation that cannot be reduced to simpler basic needs. These findings appeared to give credence to the concept of *Funktionlust* (or the joy of self-initiated activity), proposed by Karl Bühler. They also informed the beginning of interest in the United States in such topics as Abraham Maslow's "peak experience," R. W. White's "effectance motivation," Richard de Charms' "origin state," and culminated with the concept of "intrinsic motivation" most extensively studied by Edward Deci and his lab at the University of Rochester.

All of these perspectives have in common the implicit assumption that complex organisms have to take care of many other priorities besides those of survival and reproduction. At the human stage of evolution, where adaptation and survival depend increasingly on flexible responses mediated by conscious thought, individuals who are motivated by curiosity, by the willingness to take risks, to explore, to try new things, have an advantage in a rapidly changing environment. It makes sense to assume that natural selection favors those individuals, and their descendants, who enjoy learning how their world works and master its challenges – just as in less flexible species survival is enhanced when eating, sex, and other acts necessary for survival became experienced as pleasurable.

However, for an activity pattern to become established in a species' repertoire, it has to be experienced as enjoyable by the individual. To explain how this

happens, a proximal theory of motivation is needed. This is the reason why the present author began to explore such a proximal explanation, which could be called a *phenomenological approach*. It tries to look very closely at what people actually experience when they are involved in activities that involve mastery, creativity, and autonomous behavior, without prejudging the reasons for why such experiences exist. This line of explanation assumes that the human organism is a system in its own right, not reducible to lower levels of complexity such as stimulus-response pathways, unconscious processes, or neurological structures. Such an explanation is not incompatible with motivational accounts based on simpler needs. Quite often the two perspectives support each other, driving the organism in the same direction. But it is also often the case that genetically programmed instructions may come in conflict with the learned ones, or that the unconscious forces press in a direction contrary to what the phenomenological reality suggests.

## **The Flow Experience and the Conditions that Make it Happen**

The concept of flow emerged in the late 1960s as a result of a series of studies of what were initially called *autotelic activities*; that is, things people did for the sheer sake of doing, without expectation of any subsequent reward or outcome.

The initial question was: Why do people perform time-consuming, difficult, and often dangerous activities for which they receive no discernible extrinsic rewards? This was the question that originally prompted a program of research that involved extensive interviews with hundreds of rock climbers, chess players, athletes, and artists. The basic conclusion was that in all the various groups studied, the respondents reported a very similar subjective experience that was so enjoyable that they were willing to go to great lengths to experience it again. This was eventually called the *flow experience*, because in describing how it felt when the activity was going well, several respondents used the metaphor of a stream or current that carried them along effortlessly. The intense experiential involvement of flow results in three additional subjective characteristics commonly reported: the merging of action and awareness; a sense of control; and an altered sense of time.

### **Merging of Action and Awareness**

Typically people devote a good deal of mental energy to thoughts that are irrelevant to what they are doing at the present moment. People think of past accomplishments, future possibilities, pending obligations – or nothing at all. During flow, however, attentional resources are fully invested in the task at hand, so that objects beyond the immediate interaction generally fail to enter awareness.

One such object is the self. Respondents frequently describe a loss of self-consciousness during flow. In the terms that George Herbert Mead introduced, the “me” disappears during flow, and the “I” takes over.

One advantage of such a compelling focus of attention is that most of the distractions excluded from consciousness tend to be stressful or depressing. The default option of consciousness is a chaotic review of things that one fears or desires, resulting in a phenomenological state elsewhere labeled “psychic entropy.” In flow, attention becomes ordered around the pursuit of a clear goal, resulting in the exclusion of thoughts and feelings that people experience as negative.

### A Sense of Control

During flow, people typically experience a sense of control – or, more precisely, a lack of the anxiety about losing control that is typical of many situations in normal life. This sense of control is even reported in activities that involve serious risks such as hang gliding, rock climbing, and race-car driving, activities that to an outsider would seem to be much more potentially dangerous than the affairs of everyday life.

Worrying about whether one can succeed at what he or she is doing – on the job, in relationships, even in crossing a busy street – is one of the major sources of negative experiences in everyday life, and its reduction during flow is one of the reasons such an experience becomes enjoyable and thus rewarding.

### Altered Sense of Time

William James noted in 1890 that “a time filled with varied and interesting experiences seems short in passing, but long as we look back” (James, 1890/1950, p. 624). During flow, attention is so fully invested in the task at hand that there is little or none left over to devote toward the mental processes that contribute to the experience of duration. As a result, persons in flow typically report time passing quickly.

### Autotelic Experience

When a person’s subjective state includes most of the above, it is likely that he or she will wish to repeat whatever caused it, just for the sake of the experience itself. The experience becomes “auto-telic” (from the Greek words for *self* and *goal*, indicating that the goal is the experience itself, rather than any later outcome). In surveys, 10–15% of the population in the US and in Europe claim not to have ever had such an experience, while about the same percentage report having it every day.

One of the main goals of flow research in positive psychology is to help make what one does in schools, jobs, or at home as likely to produce autotelic experiences as leisure activities like sports, music, or art are able to do.

## The Conditions of Flow

Flow experiences are relatively rare in everyday life, but almost everything – work, study or interactions with others – is able to produce them provided certain

conditions are met. Past research suggests three conditions of key importance. First, flow tends to occur when the activity contains a *clear set of goals*. These goals serve to add direction and purpose to behavior. Their value lies in their capacity to structure experience by channeling attention, rather than being ends in themselves.

A second prerequisite for flow is *immediate feedback*. One needs to negotiate the continually changing environmental demands that are part of all experientially involving activity. Immediate feedback serves this purpose – it informs the participant how well he or she is progressing in the activity, and dictates whether to adjust or maintain the present course of action. It leaves the participant with little doubt about what to do next, thereby promoting the sense of control that so often accompanies flow.

Of course, positive feedback is preferable, as this improves the sense of competence. However, because flow takes place at a high level of challenges, occasional failure is inevitable. From a phenomenological viewpoint failure is not necessarily aversive, as long as the person knows why it occurred. No climber wishes to fall off the rock face, but the possibility of falling is what keeps the mind and the body concentrated on the task. Without an occasional fall, climbing soon would become meaningless.

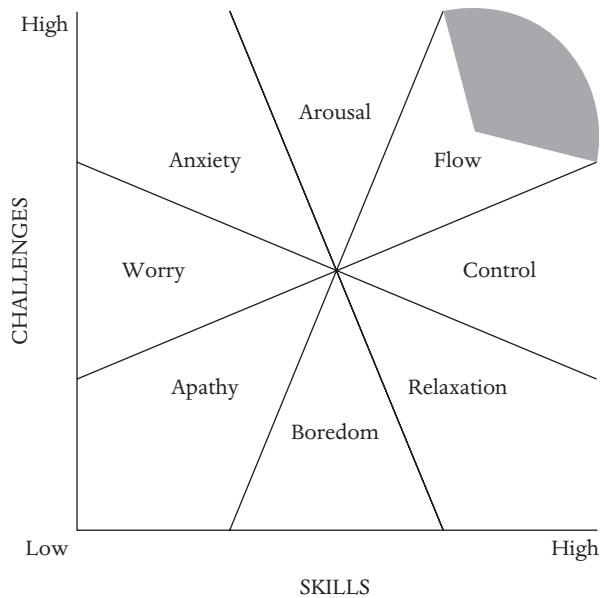
Finally, entering flow depends on establishing a *balance between perceived challenges and perceived skills*. This condition is reminiscent of the concept of “optimal arousal,” but differs from it in highlighting the fact that what counts at the phenomenological level is the perception of the demands and abilities, not necessarily their objective presence.

When perceived challenges and skills are well matched, as in a close game of tennis or a satisfying musical performance, attention is completely absorbed. This balance, however, is intrinsically fragile. If challenges begin to exceed skills, one typically becomes anxious; if skills begin to exceed challenges, one relaxes and then becomes bored. These subjective states provide feedback about the shifting relationship to the environment, and press the individual to adjust behavior in order to escape the more aversive subjective state and reenter flow. Figure 4 shows a simple diagram summarizing the way the ratio of challenges and skills usually impacts subjective experience.

Thus at the phenomenological level it is the dynamic balance between challenges and skills that provides optimal experience, and the maintenance of this balance becomes intrinsically rewarding. In terms of more distal explanations, the balance between these two dimensions of experience allows for the gradual development of ever higher skills, and thus leads to the enhancement of competence.

## Applications of Flow

Flow theory has been applied to a variety of practical uses. Some of the most promising are in the fields of education, organizational psychology, computer software



**Figure 4** The Way the Ratio of Challenges and Skills Usually Impacts Subjective Experience.

and game design. Two types of approaches can be distinguished: a) those seeking to shape activity structures and environments to foster flow or obstruct it less; and b) those attempting to assist individuals in finding flow.

The former include interventions by the Swedish police to identify obstacles to flow in the organization of police work, and then to restructure it along lines more conducive to flow on the beat. Likewise, factory work has been evaluated and reorganized at a Volvo automotive plant. Several art museums have incorporated flow principles during their design of exhibits and buildings, including the Getty Museum in Los Angeles. Flow principles have informed product design, at Nissan USA, for example, with the goal of making driving more enjoyable. At a more macro level, national policy makers and political leaders in the US, Great Britain, Austria, and other countries have been influenced by the flow concept, as have allegedly the reformers who opposed the Milošević regime in Serbia.

Educational settings present an opportunity to apply the results of flow research most directly. One experiment that deserves mention is the 15-year-old Key School in Indianapolis, which seeks to foster flow by influencing both environment and individual. The creation of this public elementary and middle school was informed by flow theory and by Howard Gardner's theory of multiple intelligences. Several other schools in the US as well as in Europe and Asia have adopted elements of flow for enhancing pedagogical practice. Educational implications of flow theory have been noted by teachers of Montessori schools, who find support in it for their educational system.

The most direct efforts to assist individuals in finding flow lie in applications of flow principles to therapeutic intervention. The relevance of flow research to occupational therapy has been discussed by practitioners who see it as articulating with the field's enduring goal of identifying meaningful occupation, help in understanding the subjective experience of occupation, and helping people engage "just-right challenges." A group of medical researchers with PhDs in psychology at the University of Milan has developed therapeutic interventions whose goal is to transform the structure of daily life toward increased flow, building on their extensive program of basic research.

Many therapies focus on the negative, under the assumption that once conflicts are worked through, happiness will take care of itself. The therapeutic approach described here reverses figure and ground. The use of flow principles allows therapy to be reoriented toward building on interests and strengths, taking advantage of the growth of skill and confidence that follows from the flow experience, and enabling the individual to reduce dysphoric experience as a by-product of this growth.

A common theme of the educational and the therapeutic application of flow principles bears underlining. The goal in either case is not to foster the state of flow directly, but rather to help individuals identify activities that they enjoy and learn how to invest their attention in these activities.

SEE ALSO: ► Csikszentmihalyi, Mihaly ► Goals and goal-setting theory  
► Life satisfaction ► Positive emotions

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## Folk Wisdom

Jerry L. Kernes<sup>a</sup> and Richard T. Kinnier<sup>b</sup>

<sup>a</sup>University of La Verne; <sup>b</sup>Arizona State University

*Folk wisdom* reflects time honored assumptions about the management of life that are more frequently validated by common sense than empirical science. Folk wisdom should be distinguished from *folk cures* or *wives' tales* which generally refer to healing practices. Folk wisdom is present in the proverbs, poetry, songs, stories, rhymes, and religions of all cultures. The admonishment, "don't judge a book by its cover," and the prescription "strike while the iron is hot" are examples of

folk wisdom found in Western culture. The morals found in Aesop's Fables are also forms of folk wisdom. From the *Hare and the Tortoise* humanity is reminded "slow but steady wins the race," whereas the *Shepherd's Boy and the Wolf* teaches that "there is no believing a liar, even when he speaks the truth" (Aesop, 2004, pp. 22 and 39, respectively.)

The study of folk wisdom as a research topic falls under the more general area of wisdom research. While a precise definition of wisdom is elusive, "wisdom is generally considered the pinnacle of insight into the human condition and about the means and ends of a good life" (Baltes & Staudinger, 2000, p. 122). Scholarly efforts at understanding wisdom have produced two strands of research guided by either implicit or explicit theories. Research grounded in implicit theories of wisdom generally explores the beliefs or thoughts that people have about wisdom or the characteristics of wise persons. Research grounded in explicit theories of wisdom focuses on the behavioral expressions of wisdom that may be empirically tested. The study of folk wisdom lends itself to either research approach. Researchers may explore the ways in which proverbs, songs, stories and other forms of folk wisdom use the term *wisdom* or characterize wise persons, or research may explore the validity of the assumptions expressed in various forms of folk wisdom.

Psychologists and other social scientists routinely operationalize and test various common sense beliefs about human behavior such as "when the cat's away, the mice will play," and "misery loves company." Yet, the empirical study of folk wisdom itself presents several challenges. First, the sweeping generality expressed by various forms of folk wisdom often makes validation difficult. For example, it would take a rather complex study to test the folk wisdom that "time heals all wounds." Second, various cultures may contain culture-specific folk wisdom that does not meaningfully translate to other cultures. Third, most proverbs found within various cultures coexist with their exact opposites. For example, in Western culture "haste makes waste," while at the same time "a stitch in time saves nine." Similarly, folk wisdom is often adapted to fit current values and ideals. In youth one might justify risky action by voicing that "you only live once." In adulthood, one might prefer to adopt the view "better safe than sorry." Finally, the meaning of old expressions can change drastically over time. For example, "putting one's nose to the grindstone" is taken as evidence of hard work by modern standards, but its original meaning reflected a cruel form of torture.

One approach to studying folk wisdom has been to explore sources of wisdom that have stood the test of time and culture and that might serve to help individuals cope with challenges of life. For example, the command of the Golden Rule to "treat others as you would like to be treated" can be found within the laws of most cultures and in the moral codes of all major religions. Kinnier, Kernes, and Dautheribes searched the sacred texts of major world religions and the mission documents of secular organizations such as the United Nations Declaration of Human Rights for other such guiding principles and constructed a "short list" of universal moral values. In addition to the Golden Rule, other principles that

made the list included the ideals of truth and justice along with a condemnation of arrogance, greed, and gluttony.

Schwartz and Schwartz and Bilsky surveyed people from around the world in an attempt to identify a framework for universal values. Among the values widely endorsed were achievement, benevolence, equality, and freedom. Peterson and Seligman created a list of universal strengths and virtues based on ten criteria. Among their criteria was that the strengths and virtues must have appeared repeatedly within the popular literature of fables, poems, aphorisms, and songs. Their findings supported the ubiquity of values such as open mindedness, courage, kindness, fairness, and mercy.

A confrontation with mortality presents another potential source of sagacious insights about life that has been repeatedly described in the literature of existential psychology. In this spirit, Kinnier, Tribbensee, Rose, and Vaughan searched for wisdom expressed by individuals who had come close to death through accident or illness. After their confrontation with death, participants worried less about daily frustrations and trivialities and advocated less materialism, more spirituality, and more caring for and serving of others.

The insights of those who are well-respected or accomplished in society can serve as yet another source of wisdom. Kinnier, Kernes, Tribbensee and Van Puymbroeck sought to identify “words of wisdom” about the meaning of life through an extensive search of quotes made by “eminent” people on the topic. Through content analysis, the authors identified ten themes on life’s meaning that could serve as a source of amalgamated wisdom for individuals searching for meaning in their lives. Included in the themes were the views that we are here to help others, to strive for self-actualization or transcendence, and to contribute to the betterment of society.

Finally, wisdom may also be derived from the speeches made by respected world leaders to the global audience. To tap that source of wisdom, Kinnier, Kernes, Hayman, Flynn, Simon, and Kilian extracted the messages found within the speeches of Noble Peace Prize laureates. The speeches typically contained references to each laureate’s specific struggles – Martin Luther King, Jr., spoke out against racism in the United States, Desmond Tutu spoke out against apartheid in South Africa, and Lech Walesa spoke out against political oppression in his native Poland. At the same time, the laureates’ speeches also transcended their particular struggles to the larger context of humanity’s ongoing fight against hatred, injustice, war, ignorance, and human suffering. Kinnier and colleagues concluded that although the laureates came from different countries and different times, their main messages were similar and stressed the struggle for social justice that affects everyone.

Efforts to identify “global” folk wisdom should continue. Efforts should also be made to identify emerging trends in contemporary sources of folk wisdom. Wisdom that withstands tests of time and cultural variations can serve as a guide for how to live as individuals and how to survive as a species.

SEE ALSO: ► Culture ► Cultural values ► Values ► Virtues ► Wisdom



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## Forgiveness

Charlotte vanOyen Witvliet

*Hope College*

### Intellectual and Social Context

In the face of interpersonal transgressions – whether crimes, conflicts, or betrayals – people may adopt a variety of responses, including passive and active attempts to retaliate, hold a grudge, deny the seriousness of the offense, cultivate compassion for the human condition of the transgressor, and/or grant forgiveness. Many people turn to forgiveness in order to heal hurts and reclaim happiness in the face of injustice.

Psychological researchers agree more on what forgiveness is *not* rather than what forgiveness is. To forgive does not necessarily mean to forget, at least not in a literal way. Forgiveness requires remembering in a way that takes seriously the wrong and the harm done. That is why forgiveness also does not mean ignoring, minimizing, tolerating, or excusing the offense. Researchers also agree that forgiveness is distinct from legal pardon. While forgiveness is merciful, it is distinct from legal processes of justice that are important for the caretaking of victims, offenders, and communities. Traditional forms of retributive punishment-based justice are being increasingly replaced or supplemented by restorative forms of justice. Restorative justice elevates the rights and dignity of victims while giving room for offenders to apologize and make restitution as part of being restored and reintegrated into their communities.

Forgiveness is also considered distinct from reconciliation. Forgiveness can be an intrapsychic process in which the victim internally undergoes a change in thinking, feeling, and behaving toward the offender. Forgiveness can even be genuine without the spoken words, “I forgive you.” By contrast, reconciliation requires a restoration of trust and re-entry into the relationship, a response that can be unsafe for victims (e.g., if offenders have a history of severe and repeated harm as in abuse or neglect) or impossible (e.g., if the offender has cut off contact, relocated, or died). Ultimately, forgiving does not mean minimizing an injustice, putting up with mistreatment, or allowing an offender to harm again. Rather, forgiveness is a courageous and gracious response that enables the forgiver to lessen the power

of a transgression to define him or her. Forgiveness remembers the past in a way that opens up the future to positive possibilities.

Forgiveness is – from a psychological perspective – a multidimensional process involving cognitive, emotional, motivational, and social features. Forgiveness is often an unfolding process that over time partially or totally eclipses unforgiving motivations such as revenge or avoidance, and unforgiving emotions such as bitterness and fear. This transformation is often achieved by fostering positive thoughts (e.g., focusing on the offender's humanity rather than defining him or her in terms of the offense; she is a *person* who lied rather than merely a *liar*) and positive emotions such as compassion or mercy toward the offender.

Forgiveness can be an expression of altruism, or other-focused care. Ironically, this form of love can only emerge when the giver has first suffered harm from a blameworthy offender. Granting forgiveness begins with blaming someone for a moral violation that caused suffering or other psychological, physical, or material losses (e.g., loss of self-esteem, relationships, opportunities, health, or damaged property health). While taking seriously the importance of justice to adequately take care of the victim, community, and offender – and only after ensuring the victim's emotional, physical, and spiritual safety – forgiveness is a moral response from a victim that seeks to overcome injustice with goodness. Forgiveness involves cultivating positive, pro-social responses (e.g., empathy, compassion, and the desire for genuine and ultimate good) for the offender so that they eventually edge out the hurt and bitter emotional responses of unforgiveness. In short, forgiveness responds to harm with rooted hope.

The study of forgiveness in positive psychology arises from a multidisciplinary context. Forgiveness addresses the social, spiritual, and psychological experience of individuals, families, communities, and nations. Forgiveness draws scholarly attention from diverse disciplines including theology, philosophy, history, literature, and the social and biological sciences. Within religious communities, forgiveness is highlighted in scriptures, sacraments and rituals, prayers, creeds, and religious writings. Forgiveness is central in Christianity, holds importance in Judaism and Islam, is valued in Buddhist and Hindu traditions, and is espoused by many individuals who do not self-identify with any given religious or philosophical tradition. Forgiveness is also at the heart of political and religious efforts to bring healing, such as the Truth and Reconciliation Commission in South Africa and Ervin Staub's work in Rwanda.

## Major Dimensions of the Topic

Key dimensions of the field of forgiveness in psychology include both the science and the practice of forgiveness. The scientific studies of forgiveness are targeting a variety of populations and issues. Although the vast majority of research is on humans, researchers are looking at animal models to discover the ways that primates resolve offenses and reconcile. Within humans, researchers are studying the

process of forgiveness across the lifespan, in children, adolescents, adults, and older adults. Others are studying forgiveness between individuals, in couples, families, groups, and societies. Two major areas of interest are the mental and physical well-being of people when they are either unforgiving or forgiving. Researchers are studying the personality characteristics of people who are generally more forgiving, the emotions that people experience when they forgive, and the physical patterns that accompany forgiveness (e.g., assessing brain scans, stress reactions, and physical health). Overall, forgiveness is associated with psychological, physical, and relational well-being.

In practice, therapists are incorporating forgiveness interventions in individual, couples, family, and group therapies. Books and articles in the psychological literature highlight various diagnostic and therapeutic issues to which forgiveness is being applied. These include relational conflicts in marriages and families, such as unresolved resentments adolescents may have for their parents. Forgiveness has also been incorporated into therapy for anxiety, depression, substance abuse, incest, eating disorders, and personality disorders.

The science and practice of forgiveness are combined in research on the effectiveness of forgiveness interventions to heal wounds and restore clients' well-being. Using a technique called meta-analysis, researchers have analyzed data from several studies at once. Forgiveness interventions have generally focused on helping people decide to forgive or helping them go through the process of granting forgiveness. Although people in decision-focused interventions do increase their decisions to forgive, meta-analyses show that they do not make any more progress in forgiving than people who are not in such a group. Interventions that guide people through the forgiveness process have used both group and individual therapy formats. The average person in a group process therapy did as well or better than 75% of people not receiving the therapy. The average person in an individual process therapy did as well or better than 95% of those not receiving the therapy. These forgiveness process clients improved in other areas as well, including anxiety, depression, and self-esteem. Researchers have also found that within forgiveness interventions, several features help clients benefit: using relaxation and anger management strategies, spending more time in the intervention (e.g., at least six hours), making a commitment to forgive, and empathizing with the humanity of the offender.

## **Changes Over Time in the Topic and its Treatment**

For most of human history, forgiveness has been a topic addressed by theology and philosophy. Psychotherapists first focused on forgiveness in the 1980s, largely stimulated by a practical theology trade book by Lewis Smedes. He wrote about how forgiveness may be the response of love that God calls people to mirror in response to each other while also healing the forgiver's undeserved hurts. Within a decade, psychological scientists began to study forgiveness in earnest. The field

burgeoned with support by the John Templeton Foundation and partner grants for Scientific Studies on the Subject of Forgiveness and A Campaign for Forgiveness Research. Two decades after Smedes' book, the field has increasing clarity about forgiveness definitions, measurements, benefits, costs, and effective interventions.

## **Current Emphases in Work on the Topic in Research and Theory**

Forgiveness researchers are currently addressing the psychological, philosophical and theological frameworks of forgiveness, the methods used to study forgiveness, the relational contexts in which forgiveness occurs, the mental and physical health implications of forgiveness, and therapy interventions used to promote forgiveness. Much of the research can be organized by two questions: a) What helps or hurts people in their attempts to forgive? and b) Does forgiveness actually help or hurt people?

A substantial portion of the forgiveness literature addresses the question: "What helps or hurts people in their attempts to forgive?" One influential factor is how people define forgiveness. If people think excusing the offender is part of forgiveness, that is an immediate barrier. By contrast, if people see that forgiveness begins by accurately naming and blaming the offender for the harm done, this may promote a willingness to begin to forgive. Research indicates that people with a strong religious identity and religious commitment – but not necessarily those who are spiritual while not religious – are more forgiving than those without such a commitment. Several emotional responses make a difference as well. Victims who experience more empathy or compassion for their offenders and those who have more agreeable personalities forgive more easily. By contrast, victims who have more hostile personalities or who show a tendency to focus on themselves and their right to be treated well by others (i.e., narcissistic entitlement) have greater difficulty forgiving. Depression has also been found to hinder forgiveness in close relationships. Still, people who experience a greater degree of closeness and relationship commitment to the offender at the time of the offense are more likely to forgive than those who were ambivalent or distant in their relationship.

Several qualities of offenses and offender responses have an impact on people's likelihood of granting forgiveness. Specifically, people are generally more forgiving of single-episode than repeated offenses, of less rather than more severe offenses, and of accidental or incidental offenses than those caused with intentional harm. The perpetrator's response to the offense can make a significant difference for victims. Apologies that take responsibility for causing harm, reflect an understanding of how much harm was caused, show remorse, and demonstrate repentance are more likely to promote forgiveness than basic "I'm sorry" apologies. Additionally, efforts to make restitution by repairing wrongs or paying in other ways promote forgiveness by victims. Similarly, when victims see their offenders brought

to justice, they experience greater forgiveness. Notably, the form of justice matters. For example, restorative justice approaches that prioritize the dignity and rights of victims while giving offenders room to apologize and make restitution (e.g., through victim offender mediation) often promote forgiveness even though restorative justice approaches make an effort to not pressure victims to forgive.

In addition to factors that promote or inhibit forgiveness, much of the literature is dedicated to determining the correlates or consequences of forgiving: "Does forgiveness help or hurt people?" Correlational research – which cannot prove any causation between two variables – has found that people who have more forgiving personalities also have less anxiety and lower blood pressure. Conversely, those with unforgiving personalities have worse self-esteem and greater depression, anxiety, and posttraumatic stress disorder symptoms (e.g., nightmares, sleep difficulty). Research has further shown that people who have a tendency to be unforgiving toward themselves for past wrongs have even greater unhappiness (e.g., worse depression, anxiety, and self-esteem) than those with difficulty forgiving others.

Experimental research shows that as people learn to forgive, they show increased self-esteem, hope, positive attitudes toward their offender, and a desire for reconciliation. While in many cases, such a desire for reconciliation may be a positive outcome for the victim, this cannot be assumed because some offenders may remain dangerous. As stated earlier, forgiveness researchers emphasize the importance of distinguishing forgiveness from reconciliation for this reason. As people become more forgiving in therapy, they also generally experience reductions in their grief, depression, anxiety, and anger, along with increases in positive affective responses.

Importantly, researchers have found that a focus on oneself or the offender matters. That is, clients seeking to forgive with the goal of restoring their own happiness initially make progress faster than those seeking to forgive out of altruistic concerns for the offender. However, in the long run, those with altruistic motives focused on compassion for the offender ultimately experience greater self-benefits, such as positive emotion.

Some studies have measured people's emotions and physiology as people either imagine or talk about unforgiving or forgiving responses to someone who has hurt them. Initial research measuring brain responses shows that remembering forgiven and unforgiven real-life offenses stimulates different brain regions including different centers associated with emotional experience. Other lines of research show that unforgiving reactions such as mentally rehearsing the painful event and the negative effects of it or nursing a grudge against the offender arouse strong, negative emotions such as fear, anger, and sadness, muscle tension at the eyebrow and under the eye, and higher levels of blood pressure, heart rate, and sweating. Some of these physical signs of stress and negative emotion even persist into relaxing recovery periods. Empathic and forgiving reactions, by contrast, have significantly more positive and calming effects. Researchers have studied empathy (i.e., focusing on compassion for the humanity of the offender, trying to understand his or her offending behavior without minimizing or excusing it) and forgiveness

(i.e., replacing hurt and bitter feelings with a genuine attempt to wish the offender well). These empathic and forgiving responses prompt greater positive and relaxing emotion, joy, and a sense of having more control in the situation, all with a calmer physiological profile.

## **Methodological Issues and/or Problems Associated with the Topic**

A careful reading of forgiveness definitions offered in recent articles and book chapters reveals an emerging consensus in defining forgiveness. However, it is important for anyone studying this area to clearly define forgiveness so that the data from research can be interpreted accurately. Often, the researchers' definitions are shaped by whether they are referring to single-episode or recurring offenses, whether the offense is unidirectional or bidirectional, whether the parties involved are individuals or groups of varying sizes, the nature of the relationship between the offender and victim, and the differing severity of offenses. Clearly, forgiveness looks quite different in an individual response to an unidentified offender of a property crime, a deceased abusive parent, or a best friend who let a secret slip out at a party. These examples differ considerably from forgiving responses of individuals victimized by the torture and violence inflicted on loved ones by an opposing regime. The process also differs from societal level forgiveness, which may be communicated by leaders speaking on behalf of warring tribal or sectarian groups with long histories of civil conflict.

The methods used to study forgiveness are expanding with the advancing sophistication of approaches in psychology. For example, psychologists are increasingly studying forgiveness using not only people's self-reports, but also the reports of others, measures of physiology (e.g., heart rate, blood pressure, sweat, muscle tension, brain scans and electrical signals), and behavioural reactions (e.g., a person's withholding or sharing of money, retaliation or cooperation in a game, or simply the speed of one's reactions on various tasks). Researchers are also interested in forgiveness not just as a one-time response to a hurt, but rather as a process of change over time.

Much like the field of psychology as a whole, the study of forgiveness reflects multidisciplinary influences. Even a quick review of the forgiveness literature highlights research that emphasizes biology, physiology, genetics, religion and theology, political science and cross-cultural anthropology.

## **Future Directions in Research, Theory, and Methodology**

To date, most research attention has been devoted to the topic of forgiving others. Studies of seeking forgiveness, forgiving oneself, and resolving anger at God have

only begun. Initial research suggests that seeking forgiveness (rather than ruminating about one's guilt) and receiving forgiveness or reconciling with one's victim (rather than being begrudged) stimulate gratitude, joy, happiness, and associated facial physiology. However, when it comes to forgiveness and stress physiology, it appears more blessed to give than receive forgiveness. In terms of self-forgiveness, greater difficulty forgiving oneself is associated with more psychological distress. Research on resolving anger at God is revealing that people often do so using processes similar to those used in interpersonal forgiveness. These areas are ripe for research using physiological and behavioral measures in combination with self-reports.

While forgiveness research has largely focused on emotional and physical well-being, the field will benefit by directing increased attention to the effect of forgiveness on relational well-being. Forgiveness may have implications that extend beyond the relationship in which the offense occurred. Forgiveness may relieve negative spillover from unresolved hurts that can burden one's other relationships with loved ones, friends, and colleagues. Such relational outcomes warrant study given that social support is an important buffer protecting mental and physical health.

Another direction for forgiveness research is to target explicitly its relationship to other virtues such as love, humility, courage, and gratitude. Finer distinctions in understanding and measuring happiness, joy, and meaning will illuminate the particular ways in which forgiveness can foster not only fleeting and thin versions of positive emotion, but enduring and substantive transformations that promote joy in response to pain.

Theorizing about forgiveness has increasingly targeted two main distinctions. First, researchers have begun to distinguish state versus trait forgiveness. Researchers theorize that forgiveness is most likely to heal hurts and restore happiness when it goes beyond being a response to a given hurt (state forgiveness) to become a personality disposition, or way of life (trait forgiveness). Second, researchers have recently begun to distinguish the decision to forgive from a forgiving change of heart. Decisional forgiveness is a behavioral intention to resist unforgiveness and to respond differently toward a transgressor. Emotional forgiveness goes further in replacing negative unforgiving emotions with positive other-oriented emotions, a shift that includes psychophysiological changes. Researchers are beginning to investigate whether emotional – rather than decisional – forgiveness more directly improves health and happiness.

Methodologically, intervention research has shown that people can learn how to forgive and that forgiveness therapies are more effective than no treatment. The next step will be to compare forgiveness interventions with other therapies already shown to be effective for treating clinical problems (i.e., empirically supported treatments) to determine whether forgiveness interventions can achieve the status of empirically validated treatments. In this and other areas of forgiveness research, studies need a greater emphasis on non-self-report methods. Given that many people value forgiveness and may want to appear forgiving, it

is important to complement self-report measures with physiological and behavioural assessments.

Forgiveness research has made great strides in a short time. Given the widespread harm of interpersonal offenses at individual, group, and societal levels, a sustained focus on forgiveness and restorative justice holds promise for equipping people to flourish in the face of pain.

SEE ALSO: ► Altruism ► Character strengths (VIA) ► Compassion  
► Gratitude ► Spirituality

## **Acknowledgement**

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## **Four-Front Assessment Approach**

Jeana L. Magyar-Moe

*University of Wisconsin – Stevens Point*

The four-front assessment approach is a model of positive psychological assessment developed by Beatrice Wright that is used to develop a complete and balanced conceptualization of clients. Those who utilize this assessment approach acknowledge that *all* people have both personal strengths and weaknesses, as well as both resources and destructive forces in their environments, and that a thorough understanding of others is incomplete if any of these four fronts is overlooked. Those that subscribe to this model of assessment purposefully attend to, gather, and report information on the strengths, assets, deficiencies, and undermining characteristics of the person, as well as the resources, opportunities, lacks, and destructive forces in the person's environment when engaging in conceptualization and diagnostic processes.

## **Development of the Four-Front Assessment Approach**

The major impetus for the development of the four-front assessment approach was the finding of several common assessment shortcomings in agencies devoted to the treatment of client problems. These shortcomings included a strong concentration on negative aspects of client functioning with little to no concern for positive aspects, and almost complete focus on personal traits and attributes of clients with little to no regard for the role of environmental factors in their lives.



These issues distort the realistic assessment of clients and interfere with the development of optimal treatment plans.

### Practitioner Errors/Biases

The tendency for practitioners to emphasize the negatives of individuals in assessment may be due, in part, to the fact that most clients enter therapy as a result of experiencing problems that they perceive as being negative; thus, inferences about the causes of the problems are also negative. Indeed, under many conditions people, in general, tend to weigh negative aspects of situations more heavily than positive aspects. Additionally, practitioners may fall victim to the fundamental negative bias when dealing with behaviors, thoughts, or emotions that are salient, that are negative in valence, and that occur in a vague context. Under these circumstances the major factor that guides perception of the behavior, thought, or emotion is its negative quality. Practitioners who are detached from the client's situation (e.g., outsiders) are also more prone to see negatives in the client's situation in comparison to the client (e.g., insider), who is directly affected by the situation. Similarly, failure to assess the environment may be due to the fundamental attribution error, or the tendency of people to explain the behavior of others through attributions to the person's internal characteristics while ignoring external situational or environmental factors. Finally, environmental neglect may result from the fact that the client commands attention and is more accessible than the environment, which is less accessible and harder to assess.

### Four-Front Assessment Approach Methods

The four-front approach was formulated as an assessment tool that would ensure that all components of a client and his or her environment are considered and used to inform optimal treatment. At the core, practitioners utilizing this approach gather information about the four fronts through asking four main questions: 1) What deficiencies does the person contribute to his or her problems? 2) What strengths does the person bring to deal effectively with his or her life? 3) What environmental factors serve as impediments to healthy functioning? and 4) What environmental resources accentuate positive functioning? The answers to such questions can be identified through working collaboratively with the client, utilizing such methods as balanced observations and clinical interviews, solution-focused interviewing, and structured tests of pathology and negative symptomatology, individual strengths and positive attributions, and the environment. After assessing the four-fronts, results should be shared with the client (as well as colleagues and others who may provide support and care to the client) and documented in progress notes and written reports with equal space, time, and emphasis being placed on each of the four dimensions.

## Therapeutic Benefits of the Four-Front Assessment Approach

Highlighting the strengths and deficits in both the person and the environment serves many important therapeutic purposes. Indeed, as a result of utilizing the four-front assessment approach, clients may experience more positive feelings towards themselves and their therapists as they are encouraged throughout the therapy process to view their lives from a balanced perspective. Clients are more likely to recall and reclaim their personal worth, and to be more hopeful about and motivated to pursue therapy when being assessed on all four-fronts. In addition, having a therapist take interest in the client as a whole person who exists within an environmental context, rather than equating the client with his or her problem, facilitates the development of the client-therapist working-alliance, a necessary condition for successful therapy outcome. Finally, assessment according to the four-front approach also enhances success rates in therapy as practitioner biases are minimized, diagnoses are more accurate, and the foundations for building an optimal treatment plan become more clear.

SEE ALSO: ► Environmental resources ► Labeling (positive effects)  
► Strengths perspective (positive psychology)

## Frankl, Viktor Emil

Alfried Längle

*International Society of Logotherapy and Existential Analysis, Vienna*

Viktor Frankl (1905–1997): Austrian psychiatrist, neurologist, psychologist, founder of logotherapy and existential analysis. Frankl's work is centered around the question of meaning. After first interests in Freud's psychoanalysis, in 1924 he joined Alfred Adler's Society for Individual Psychology. In 1927 he was excluded on account of "deviating thoughts," influenced by Max Scheler's philosophical anthropology on which he later based his *logotherapy* (therapy through finding meaning). During World War II, Frankl worked as a psychiatrist at the Rothschild hospital. Although he was granted an exit visa to the United States, he stayed in Austria in order to protect his Jewish parents. In 1942 he and his family were nevertheless deported to concentration camps. For him, the two and a half years in the concentration camp were an experimental confirmation of the "survival value" of the question of meaning.

From 1945 to 1970 Frankl headed the neurological department of the Vienna polyclinic and wrote his main theoretical works. The invitation of Gordon Allport to Harvard (1961) was followed by further guest lectures at 208 universities around the world. He was Distinguished Professor for Logotherapy at the United States

International University in San Diego. Frankl received 28 honorary doctorates and many other important awards. His 31 books were published in 24 languages. Frankl lectured until 1996.

Frankl's books include *The Doctor and the Soul*, *From Psychotherapy to Logotherapy*, *Man's Search for Meaning: An Introduction to Logotherapy*, and *Psychotherapy and Existentialism: Selected Papers on Logotherapy*. In addition to these works, much has been written about Frankl including Längle's *Viktor Frankl: A Portrait* and Längle and Sykes' "Viktor Frankl – Advocate for humanity: On his 100th birthday" in the *Journal of Humanistic Psychology*.

## Theoretical Orientation and Development

Frankl originally understood existential analysis and logotherapy as a complement to any psychotherapy in order to overcome its reductionist tendencies (that is, as an anthropological corrective to psychologism). By making reference to the philosophical anthropology of Max Scheler, Frankl intended to "rehumanize" psychotherapy by working explicitly with the "spiritual dimension," which consists in the capacity of deciding, taking over responsibility and finding meaning. As a "spiritual being," the primary aim of the human is not lust (Freud) or power (Adler), but an understanding of his existence (especially in suffering) for being able to realize oneself as a free person. The "will to meaning" is considered the primary motivational power. Existential analysis/logotherapy offers by its philosophical foundation an anthropological concept and methods for prevention and therapy. The paradoxical intention (playful, humorous wish of the feared) in the treatment of fear and the dereflexion (concentrating on meaning instead of thinking about wished goals, applied mainly in sexual disorders) are among the most well-known techniques. The phenomenological approach of existential analysis was methodically enhanced by the development of personal existential analysis (Längle). The lack of methods in logotherapy was ultimately balanced out by developments of Uwe Böschmeyer, Elisabeth Lukas and Alfried Längle.

SEE ALSO: ► Existential psychology ► Meaning ► Personal responsibility

## Fredrickson, Barbara

Michele M. Tugade  
*Vassar College*

Barbara Fredrickson (1964–) boldly asked the question, "What good are positive emotions?" at a time when emotions research focused largely on the study of negative emotions. It seemed reasonable, during this time, to investigate the likes of anger, sadness, fear, and anxiety because many scholars felt that a primary aim of

psychology was to solve problems of the human condition. Fredrickson astutely pointed out, however, that the dearth of research on positive emotions left much of the human experience virtually ignored by science. The time was ripe for change. With a penchant to investigate what nobody else was studying, Fredrickson took action and was a catalyst for a new focus in emotions research and positive psychology. Her ground-breaking broaden-and-build theory addressed the evolutionary significance of positive emotions. Her theory posits that the function of positive emotions is to broaden one's thoughts and actions. By consequence, one's broadened mindset helps to build personal resources, such as an expanded social network, an enriched knowledge base, or more flexible problem-solving skills. One of the biggest rewards for Fredrickson is to see her broaden-and-build theory applied in a number of domains, including clinical practice, school systems, and work organizations.

Fredrickson's ideas about positive emotions were no doubt shaped by the guidance of several influential mentors. She earned her BA from Carleton College (1986), where she was awarded distinction in her major of psychology. She then earned her doctorate from Stanford University (1990). There, she worked with Laura Carstensen and Susan Nolen-Hoeksema on research that examined affect and self-regulation. A pivotal point in Fredrickson's career came when she was a National Institute of Mental Health Postdoctoral Fellow at the University of California Berkeley Psychophysiology Laboratory of Robert Levenson. It was at Berkeley that she launched her program of research on positive emotions. She discovered that positive emotions have the unique ability to undo the lingering cardiovascular after-effects associated with negative emotions. Although Fredrickson's research illustrates the adaptive benefits of positive emotions, she cautions that too much positive emotion in one's life can be maladaptive. Her work shows that a positivity ratio – a mean ratio of positive to negative affect of about 3-to-1 – can differentiate those who have flourishing versus languishing mental health. These discoveries marked important turning points in Fredrickson's career. She now devotes her scholarly energies fully to study of positive emotions.

Fredrickson's first academic appointment was at Duke University (social and health science). She then rose through the ranks of assistant to full professor at the University of Michigan (social psychology), where the interdisciplinary environment was valuable for allowing her research to develop and thrive. In 2006, she was named the Kenan Distinguished Professor of Psychology at the University of North Carolina, Chapel Hill, where she also directs the Positive Emotions and Psychophysiology Laboratory. In addition to being a strong researcher, Fredrickson continues to be an influential teacher and mentor, shaping the lives of a number of scholars across several disciplines of psychology. A generative mentor, she encourages her students explore their own ideas and grow intellectually.

In recognition of her vision and influence in psychology, Fredrickson has won several awards and distinguished honors, including the largest prize in psychology, the Templeton Prize in Positive Psychology (2001). She is also a Fellow of

the American Psychological Association, an award given for her outstanding contributions to the field (2005).

SEE ALSO: ► Broaden and build theory ► Flourishing

## Freedom

Charlotte M. McCloskey

*University of Missouri – Columbia*

To date, the concept of freedom as a construct has been largely ignored or simply not investigated by theorists in the psychological literature. Some authors have looked at the freedom of the will or freedom of choice, but overall the concept remains largely philosophical. However, in a general sense, the term freedom is synonymous with expressions like liberty and license. All of these words refer to the power to act, speak or think without externally imposed boundaries or limitations. Furthermore, freedom can be defined as the ability to act without the threat of force being used to curtail thoughts, feelings or actions. We can also give freedom to others by not violating their right to life and liberty.

If freedom is considered in regard to emotional expression, it can be described as being free of constraints and the power to act, speak, or think without externally imposed restraints. An example of this would be an individual supported by hope or happiness making choices that would have otherwise been limited to them. Individuals, who are free to pursue their own happiness, can make choices that are necessary for successful sustenance and development.

Freedom in regard to positive individual traits consists of the strength and virtue of an individual to exercise choice: free will. Individuals can illustrate this through choices made in their daily life through actions that shape and define their everyday experience. Additionally, it is the trait of giving freedom to others. In this regard, freedom may be illustrated by the ways that parents give license to their children, allowing for the child to grow and develop through making individual choices.

Freedom in regard to positive institutions can occur through multiple avenues. One way is the strength of an agency that gives unrestricted use and full access to the resources. It may also mean that the individual will not be hindered or controlled by the institution when engaging in certain actions. As such, a society can also give individuals the right to make unfettered choices through policy and law. However, choice is not the definition of freedom; it is simply one of the consequences of being free.

A greater sense of freedom may ultimately help to enable the individual reach higher states of happiness, health and self awareness. Freedom, through the action of allowing individual choices based on authenticity, may enable and allow that individual to thrive and develop new states of awareness and self-worth. Freedom may be one of the critical conditions, traits and facilitators of change.

As psychologists, if we strive to create social justice in our world, it can provide a criterion for what we hope to achieve, provide and support in others.

SEE ALSO: ► Authenticity

## Functional MRI

Melanie Canterberry and Omri Gillath

*University of Kansas*

Recent application of advanced imaging techniques, providing detailed information on brain structure and functioning, has broadened the understanding of psychological processes and phenomena related to positive psychology. Focusing on the brain has allowed researchers to identify brain structure and activation patterns related to tendencies investigated in positive psychology (e.g., optimism, security, well-being, and curiosity), and to learn more about the mechanisms underlying phenomena such as empathy. Such findings not only progress science but are also likely to have clinical and practical implications – spreading the beneficial effects of positive psychology.

In magnetic resonance imaging (MRI) a powerful magnetic field is used to produce images of internal bodily structures, allowing for the diagnosis of disorders and diseases in a noninvasive way. In recent years, researchers began using MRI to determine the functioning of the brain by implementing a process called *functional* MRI (fMRI). With fMRI, a person's brain is scanned and changes in neural activity are assessed. When neural activity is increased in a specific region, it results in a heightened demand for oxygen to the region. Documenting changes in the surplus of freshly oxygenated blood to a region allows fMRI to provide real-time information characterized with high spatial resolution of the brain structure and functioning involved in behaviors and psychological phenomena of interest.

A main area in positive psychology that has benefited from the advantages embedded in fMRI is the study of altruism. Research in this domain includes investigation of topics such as perspective-taking, empathy, compassion, and prosocial tendencies and behavior. Using fMRI, researchers have been able to generate models describing the way people understand others' feelings, or what happens when people witness someone else's pain. For example, Cunningham and colleagues examined brain regions involved in theory of mind skills (ToM – the ability to attribute mental states – beliefs, intents, desires, pretending, and knowledge – to oneself and others), suggesting that similar brain regions are activated when people *act in a certain way*, *think* about this *action*, or *see* someone else *acting* in a similar way. Similarly, in her seminal research Singer identified various neural networks that are activated both when people personally experience pain, and when they observe others suffering from a pain to the same bodily organ.

A related finding that has generated controversy is the function of *mirror neurons* (premotor neurons that fire both when an organism acts and when it observes

the same action performed by another) among humans. The existence of such cells can help explain how people understand the actions and feelings of others. Mirror neurons, however, are not the only brain regions that have been suggested to be related with empathy (see also, for example, the anterior insula and cingulate cortices). These findings indicate that empathy may result from a top-down process, involving ToM, in which a person takes the other's experience into account as well. The use of fMRI has also helped distinguish between people who can identify and express their own emotional states and those who cannot (people with alexithymia) thus improving the understanding of how such processes take place.

Related to the research on empathy is the use of fMRI in studying behavior, caregiving, and prosocial tendencies. For instance, research in James Coan's laboratory demonstrated that when people are under threat or when experiencing pain, holding their caregiver's or attachment figure's hand buffers the brain activation in response to threat. This suggests that the beneficial effect of caregiving or helping may be related to emotion-regulation abilities. Thus, receiving support is likely to attenuate threat-related activation in emotion-regulation-related regions. This was found particularly among people high on marital quality, emphasizing the role of positive relationships in attenuation of threat-related brain activation and cognitive control.

These findings fit with other research using fMRI to investigate the underpinnings of close relationships, attachment security, and social bonding. Bartels and Zeki were able to use brain imaging to show that love and sexual desire, although correlated, seem to rely on different brain systems. Moreover, using fMRI has enabled researchers to explore the way people cope with their emotions, especially emotions and thoughts related to close relationships. Gillath and colleagues, for instance, showed in their 2005 paper how people who are highly sensitive to threatening cues tend to have stronger activation in emotion-related brain regions (such as the amygdala) and lower activation in control-related regions (such as the orbitofrontal cortex), which might explain their high sensitivity and inability to suppress threat-related thoughts. Furthermore, they were able to identify different patterns of activation related to thought suppression among people who avoid intimacy as compared with those who are less likely to avoid it.

Finally, having a general positive attitude, being optimistic, or experiencing positive feelings was found to be associated with activation in the left hemisphere. As illustrated in research led by Canli, overall brain reactivity was found to be lateralized toward the left hemisphere when participants viewed positive pictures and toward the right hemisphere when they viewed negative pictures. This laterality effect relating the left hemisphere and positivity, and more specifically patterns of activation in both the limbic system (especially amygdala) and control-related regions (mainly the orbitofrontal and prefrontal cortexes) which allow better regulation of emotions with positive mood and well-being, suggests that "happier" people might have a better ability to regulate their feelings and cope with negative information. Thus, fMRI has aided in the understanding of how people cope with emotions and stay happy.

Uncovering how people understand others and their feelings or pain, how people regulate their own emotions, and why some people are happier, more loving, or more empathic than others are all questions that have just begun receiving answers now. Moving beyond the localization of phenomena in the brain to their functioning will allow a better understanding and facilitate the formation of a more positive society.

SEE ALSO: ► Altruism ► Compassion ► Emotions ► Empathy  
► Optimism

## **Future Mindedness**

Matthew W. Gallagher

*University of Kansas*

*Future mindedness* refers to a general orientation toward the pursuit and achievement of future goals. While psychology has historically focused on negative orientations toward the future such as hopelessness and pessimism, psychologists have more recently examined the potential benefits of positive expectations in the form of hope, optimism, and self-efficacy. These conceptualizations of positive expectations for the future have been dubbed “Velcro constructs” for their tendency to be associated with positive life outcomes in a wide range of life domains and have been found to be one of the strongest, if not the strongest, predictors of life satisfaction in adults.

## **Evolutionary Significance**

The ability to conceptualize time in terms of the past, present, and future was a critical development in human evolution. This ability to plan for future goals that are not determined by emotions or instincts is part of what distinguishes humans from other primates (to some extent) and from other creatures more generally. It has been suggested that the human capacity for optimism developed along with these cognitive capacities for future goal-directed thought. Tiger argues that optimism/hope played an integral role in human evolution by providing our ancestors with the motivation and confidence necessary to manage successfully the uncertainty and anxiety that arose as they contemplated and experienced new and unforeseen situations and challenges.

## **Orientations Toward Time**

With the ability to conceptualize time in terms of past, present, and future, the possibility arises that individuals may differ in the extent to which they emphasize



past, present, or future orientations. Philip Zimbardo and colleagues at Stanford University have examined the cognitive processes that underlie these conceptualizations and have identified five profiles that reflect the assortment of ways in which individuals think about time: past-positive, past-negative, present-hedonistic, present-fatalistic, and future. The future orientation is characterized by a general orientation towards the future that emphasizes the pursuit of future goals. This future orientation has been found to be associated with decreased levels of depression and anxiety, increased levels of self-esteem and conscientiousness, and higher GPAs in college students.

While this research suggests that there are advantages of having a general orientation towards future goals and concerns, much of the research in positive psychology has focused on the form that individuals' positive expectations for the future may take. To date three theories have been proposed that have been empirically evaluated and found to consistently explain and predict adaptive behavior.

## Self-Efficacy

One of the first psychological theories proposed to explain the method in which individuals might develop positive expectancies for the future is the theory of self-efficacy developed by Albert Bandura at Stanford University. Self-efficacy is defined as people's perceptions of their capability to execute the actions necessary to achieve a desired goal. Self-efficacy is not a perception of whether one *will* perform these actions or whether one *will* necessarily achieve the desired outcomes, but an evaluation of whether one *can* perform the necessary actions. Self-efficacy has been studied as a general individual trait but is more often studied relative to particular domains. It has been found to be a powerful predictor of both behavior and outcomes in academic, work, health, and other settings. The power of self-efficacy in shaping behavior and enabling positive outcomes is epitomized in the classic children's story *The Little Engine that Could*.

## Optimism

An alternative theory of positive expectancies is the optimism model developed by Charles Carver and Michael Scheier. They define optimism as a general expectation of favorable outcomes in the future along with an expectation of an absence of undesired outcomes. They have found optimism to be a stable trait that is consistently associated with improved psychological and physical well-being. Optimism is measured in global terms and is posited to produce effects by impacting the way in which individuals think about and pursue goals, and how they react to adversity when pursuing their goals. Optimistic individuals, relative to pessimistic individuals, have been found to experience higher levels of positive emotions, to

cope more adaptively with a variety of health crises, and generally to report higher levels of physical and psychological well-being.

## Hope

A third conceptualization of future mindedness is the cognitive model of hope developed by Rick Snyder and colleagues at the University of Kansas. Hope theory suggests that human behavior is primarily driven by the pursuit of goals and that hope reflects the synthesis of two components that are vital for the successful attainment of goals: pathways and agency thinking. Pathways thinking is the organizational component of hope theory and reflects one's perceived ability to identify the necessary routes to achieve the desired goals (i.e., how to get from point A to point B). Agency thinking provides the motivational force in hope theory and reflects one's perceived ability and likelihood to use the identified pathways to achieve the desired goals. Hope theory blends the expectation emphasis of optimism with the personal agency emphasis of self-efficacy while adding the pathways component to explain how individuals move from agency to outcome. Hope differs from self-efficacy in that the intention to pursue the goal and belief in the eventual positive outcome has a greater emphasis in hope theory. Hope theory also differs from optimism by placing the individual as the primary source and force in determining the desired outcomes. Similar to optimism and self-efficacy, hope has been examined in numerous contexts and has consistently been found to be associated with and to predict favorable and adaptive outcomes in each of these settings.

## Future Directions

Psychological research has consistently shown that positive expectations for the future (as measured by hope, optimism, and self-efficacy) and a general orientation towards future goals and plans can have powerful and profound effects on individuals and what they are able to achieve. It is important to note, however, that these theories do not suggest that merely passively waiting and wishing for good outcomes is enough to achieve desired goals. Rather, they suggest that a positive orientation toward the future, whether it is described in terms of self-efficacy, optimism, or hope, can help provide the motivation and persistence that enables people to achieve their goals and dreams. It will be important for future research on future mindedness to examine whether there might be situations in which these positive orientations could be maladaptive. It will also be critical to examine the unique contributions that each of these three constructs provide in predicting positive outcomes.

SEE ALSO: ► Hope ► Optimism ► Self-efficacy ► Well-being



## Gallup

Timothy D. Hodges

Gallup has studied human nature and behavior for more than 75 years. An employee-owned organization, Gallup's associates around the world include many of the leading scientists in management, economics, psychology, and sociology. Gallup performance management systems are designed to enable organizations to accelerate organic revenue growth by increasing customer engagement and maximizing employee productivity through measurement tools, coursework, and strategic advisory services. Gallup delivers services at client organizations, through the Web, at Gallup University's campuses, and in 40 offices around the world. The Gallup world headquarters is located in Washington, DC, and the operational headquarters is in Omaha, Nebraska.

Company founder George Gallup (1901–84) earned a BA, MA, and PhD in Political Science at the University of Iowa. During his time as a student at Iowa, Gallup edited the campus newspaper, *The Daily Iowan*. His doctoral dissertation explored new methods for measuring reader interest in newspapers. After teaching at Drake University, Northwestern University, and Columbia University, Dr Gallup joined Young & Rubicam in New York City, where he became the first director of market research for an advertising agency.

Dr Gallup's initial breakthrough came in 1936, when he correctly predicted that Franklin Roosevelt would defeat Alfred Landon for the US Presidency. Gallup's prediction, based on just 5,000 scientifically selected respondents, contradicted the *Literary Digest* and their poll of more than two million respondents, which predicted a landslide victory by Landon. National newspaper syndication of this poll and regular references in the press helped make "Gallup" a well-known name.

In the late 1930s, just before the start of World War II, Gallup, in partnership with several survey researchers, established a network of independent polling

organizations representing almost 50 countries. This network of researchers, known as the Gallup International Research Institute, met annually to analyze and report on relevant topics of the day including politics, religion, the state of the family, and world hunger. This research led to Dr Gallup's reputation as a scientist and advisor to many global leaders. In 1958, Dr Gallup grouped his polling endeavors together and founded The Gallup Organization.

Following Dr Gallup's death in 1984, several Fortune 500 companies explored the possibility of acquiring The Gallup Organization. However, after nearly four years of negotiation, in October 1988 The Gallup Organization was acquired by employee-owned Selection Research, Incorporated (SRI). Based in Lincoln, Nebraska, SRI was founded in 1969 by Dr Donald O. Clifton (1924–2003), an educational psychologist. SRI was a pioneer in conducting structured psychological interviews to identify the talents of individuals, to help organizations correctly select employees for the roles that best fit these talents, and to consult on how to best help these employees and organizations succeed. James Clifton, a leader in the merger of the two organizations, was named CEO in 1988. Over the next decade, the company's revenues grew tenfold and expanded into more than 20 countries.

The Gallup Organization realized a significant opportunity when business leaders in the 1980s and 1990s began to focus on total quality management. With expertise in both public opinion polling and workplace consulting, The Gallup Organization was well positioned for a business model that included ongoing tracking studies of customer satisfaction. These efforts contributed to the largest period of growth in the company's history.

In the late 1990s, business leaders became increasingly interested in the opinions of their employees. While job satisfaction surveys had been in place in many organizations for decades, they were often focused on singular issues that changed from year to year. The Gallup Organization's science of employee engagement, based on 25 years of workplace research and analysis, focused on basic employee attitudes that affect workplace morale and, ultimately, productivity. These primary workplace needs were captured in just 12 key elements written and analyzed by scientists at The Gallup Organization. The company developed partnerships with hundreds of organizations around the world who had committed to tracking and taking necessary action to improve employee engagement, as measured through these 12 key elements, on an ongoing basis.

Although the science of psychology had historically focused on what was wrong with people, The Gallup Organization's Clifton StrengthsFinder assessment was based on identifying the positive in individuals. Building from more than 30 years of in-depth research by Don Clifton and his team of scientists, the Clifton StrengthsFinder is a Web-based assessment designed to unearth the talents that lead to positive outcomes. Millions of individuals around the world have leveraged the science behind the Clifton StrengthsFinder. Clients of The Gallup Organization use the assessment to identify the talents of individuals within their organizations, and partner with consultants at The Gallup Organization to create programs designed to develop these talents into strengths to achieve greater success in their roles.

Leading up to the year 2000, The Gallup Organization had collected and analyzed billions of bits of economic, employee, and customer data. The Gallup Path, created by synthesizing the many discoveries contained within these data, is The Gallup Organization's premier management consulting model that helps define the role of human nature in driving business outcomes. At the heart of the model is the theory that in every organization, every employee, at all levels, contributes to some degree to sales growth, profit, and ultimately, share price. The Gallup Path for microeconomics serves as a behavioral economic model for organizations. The steps on the Gallup Path for microeconomics are as follows: Identify Strengths, The Right Fit, Great Managers, Engaged Employees, Engaged Customers, Sustainable Growth, Real Profit Increase, and Stock Increase. This Gallup Path tracks the connectedness of managers to employees, employees to customers, and customers to hard financial outcomes.

At the heart of the Gallup Path is one of the toughest issues facing organizations today: managing the moments when employees interact with customers. Decades ago, Six Sigma changed the face of quality in manufacturing by reducing variance, revolutionizing businesses, and boosting profits. The Gallup Organization's recent scientific breakthrough, Human Sigma, is poised to do the same for sales and service organizations. Research underpinning the Human Sigma theory and consulting includes data from more than 10 million employees and more than 10 million customers around the world. The Human Sigma approach combines a proven method for assessing the health of the employee-customer encounter with a disciplined process for improving it.

A recent major initiative at The Gallup Organization builds on the company's public opinion polling legacy. The Gallup World Poll is the largest available source of key world data, providing access to the voices, hearts, and minds of citizens in more than 130 countries and areas of the world. In the largest undertaking of its kind, the Gallup World Poll is measuring the well-being of the world's citizens over 100 years, continually polling a representative sample of 95% of the Earth's adult population. To conceptually arrange this incredibly extensive data set, the organization developed the Gallup Path for macroeconomics as a behavioral economics model for societies. The steps on the Gallup Path for macroeconomics are as follows: Law & Order, Food & Shelter, Work, Economics, Health, Well-Being, Engaged Citizens, Brain Gain, and GDP. The Gallup Organization partners with top global scientists to analyze and draw discoveries from this extensive data set, and consults with leaders in governments, nongovernment organizations, and private sector organizations around the world to implement these discoveries into their policies and strategic plans.

In 2007, The Gallup Organization shortened the company's name to simply Gallup. In addition, the various lines of business were arranged into four major areas: Gallup Poll, Gallup Consulting, Gallup University, and Gallup Press.

The Gallup Poll has built its reputation on delivering relevant, timely, and visionary research on what people around the world think and feel. Gallup Poll consultants assist leaders to identify and monitor behavioral economic indicators

worldwide. Major Gallup Poll initiatives include the Gallup World Poll, the Gallup Panel, and several extensive daily tracking polls of items of interest to world citizens.

Gallup Consulting is a global research-based consultancy, specializing in employee and customer management. Gallup consultants draw on an extensive suite of constructs and tools like Human Sigma to drive business performance.

Gallup University is a leading provider of management education and leadership development programs. Gallup University offers a complete curriculum on managing employee and customer assets and factors that drive individual and organizational performance. Courses draw from Gallup Path science and performance data to develop individualized learning experiences. Classes are offered online, on-site with clients, and at Gallup University campuses around the world.

Gallup Press exists to educate and inform the people who govern, manage, teach, and lead the world's six billion citizens. In addition to offering books on groundbreaking management, social, and political research, Gallup Press produces the *Gallup Management Journal*, a monthly online business publication with actionable insights for business leaders and management scholars. Each Gallup Press publication meets stringent requirements of integrity, trust, and independence and is based on Gallup-approved science and research. Best-selling Gallup Press titles include *How Full Is Your Bucket*, *12: The Elements of Great Managing*, *StrengthsFinder 2.0*, and *HumanSigma: Managing the Employee-Customer Encounter*.

Gallup has been very involved with positive psychology throughout its history. The first Positive Psychology summits were organized by and hosted by Gallup in Lincoln, Nebraska, and Washington, DC. Several of Gallup's Senior Scientists are recognized leaders in positive psychology and behavioral economics. Gallup's former chairman, Don Clifton, was cited as the "Father of Strengths-Based Psychology" and "Grandfather of Positive Psychology" in an American Psychological Association Presidential Commendation. Extensive areas of Gallup research, including employee selection, strengths identification and development, employee engagement, customer engagement, and social and economic research, apply positive psychological principles. Gallup is focused on the attributes that cause individuals, organizations, and societies to succeed and flourish. Further, Gallup manages its own associates and client relationships based on principles of positive psychology.

SEE ALSO: ► Clifton StrengthsFinder ► Clifton Youth Strengths Explorer  
► Clifton, Donald O. ► Employee engagement ► Strengths (Gallup)

## Gallup World Poll

Gale D. Muller and Jim Harter  
*Gallup*

In 2006, Gallup initiated the Gallup World Poll, which is representative of more than 95% of the world's population. The World Poll is conducted in more than

130 countries in any 2-year time span and features a consistent set of standard questions in all surveys.

## **Background**

Historically, Gallup has always been at the forefront of gathering crucial information from people around the globe. Dr George Gallup was a public opinion research pioneer, not only in the United States but also throughout Europe, Latin America, Israel, Australia, and Asia. More than any other social scientist of his time, he worked to build a network of researchers who were interested in world opinion. Multination polls were initiated as early as the late 1930s and continue to the present day. Many of the question items used in past Gallup Polls have been retained in the Gallup World Poll instruments.

In the 1990s, Gallup initiated a series of landmark studies. One series began in China in 1994, long before any other public opinion work was initiated there. All were nationwide studies of Chinese people. In 1996, Gallup initiated a similar set of nationwide studies in India, and conducted baseline studies in Israel and the Palestinian Territories in 1999. In 2001 Gallup started the Gallup Poll of predominately Muslim Countries.

All multination studies to date are limited in one way or another. For example, the International Social Survey Program (ISSP) includes about 40 countries, the Pew Global Attitude Survey studies about 50 countries, Transparency International Global Corruption Barometer surveys about 70, and even the famous World Values Survey is limited to approximately 80 countries.

There are more than 190 member countries in the United Nations and more than 200 countries in total. There are more than 150 countries with populations of more than 1 million people, and approximately 140 with populations with more than 2 million. Even the most ambitious of all multination studies include only half (or less) of all countries. In addition, the studies usually include more developed countries with well-developed data collection systems and a limited number of developing nations where data collection systems are less well developed. Finally, in many cases, data collection in some hard-to-research nations include only a portion of the country: major cities, higher-income areas, or areas that are least dangerous or easiest to access.

The target for the Gallup World Poll is to include data from more than 130 countries using nationwide samples to ensure all inhabitants are represented. The studies are representative of more than 6 billion people (more than 95% of the world's population). With rare exception, Gallup World Poll studies use nationwide samples.

## **Content**

Respondents from each country included in the Gallup World Poll are asked a series of identical questions. The long Gallup history of worldwide public opinion research was drawn upon to develop these core questions. In addition, a series

of informal as well as formal investigative workshops were conducted with individual experts and groups of experts who had a vested interest in world opinion. Input was provided from key government leaders, economists, psychologists, and sociologists, among others.

This core group of items is organized around important content areas, which are then placed in numerically scored indexes. The following is a list of some of the key indexes:

- Law and order
- Food and shelter
- Work
- Economics
- Health
- Well-being
- Engaged citizenship
- Immigration
- Corruption
- Environment
- Youth development
- Entrepreneurship
- Religiosity
- Communication

## Methodology

The Gallup World Poll uses two primary methodological designs:

- A Random-Digit-Dial (RDD) telephone survey design is used in countries where 80% or more of the population has landline phones. This situation is typical in the United States, Canada, Western Europe, Japan, Australia, etc.
- In the developing world, including much of Latin America, the former Soviet Union countries, nearly all of Asia, the Middle East, and Africa, an area frame design is used for face-to-face interviewing.

In countries where face-to-face surveys are conducted, census listings of Primary Sampling Units (PSU), consisting of clusters of households, are used as the basis for random sampling.

In the RDD surveys, at least five call attempts are made to reach a person, aged 15 and older, in each household. Typically the design is not stratified, but otherwise, the other processes and procedures follow those used in the face-to-face design.

Once data are collected, aggregate data are scientifically weighted according to national population parameters.

The typical World Poll survey in a country consists of 1,000 completed questionnaires. However, in some countries, oversamples are collected in major cities.



## Regional In-Depth Studies

For most regions throughout the world, in addition to the Gallup World Poll's core content coverage a series of in-depth studies is conducted on an annual basis. Topics are focused on current issues of concern for that region. Regions or country groups for some such studies include:

- predominantly Muslim Countries;
- former Soviet Union (includes the 15 former USSR countries);
- the Balkans (includes non-EU countries in Central and Southeast Europe that are in economic and political transition);
- Sub-Saharan Africa (includes numerous countries that have major medical and economic challenges);
- Latin America (includes South America, Mexico, Central America, and the Caribbean);
- China-India (includes tracking information about economic and social issues in the world's two largest countries);
- South Asia (includes countries other than India and China in this populous, changing area of the world); and
- Israel-Palestinian Territories.

## Concluding Comments

The Gallup World Poll will evolve as the needs of global leadership and world events dictate. On the other hand, key indicators will remain consistent across countries, regions, and over time. In this way, a given country, region, or targeted subpopulation can be monitored for change and improvement. Although such measurement alone cannot improve the well-being of the world's citizenship directly, accurate, consistent, and thorough measurement can act as an important stimulant to positive change.

SEE ALSO: ► Gallup Organization

## Giftedness

Karrie A. Shogren  
*University of Texas at Austin*

*Giftedness*, often described as the presence of extraordinary abilities in a given area, has received significant attention throughout history. However, the specific skills and abilities believed to comprise giftedness and the methods used to identify and educate gifted individuals have varied significantly over time. For example,

in ancient Sparta, individuals were considered gifted if they had outstanding military and leadership skills. In Roman society, outstanding physical stamina and intelligence were believed to define giftedness. In contemporary times, particularly since the introduction of standardized tests of intelligence in the early 1900s, giftedness has often been equated with having a high intelligence quotient (IQ). In a famous study, Lewis Terman, a Stanford psychologist who developed the Stanford-Binet Intelligence Test, examined the IQs of a group of California students identified as highly intelligent by their teachers. He followed these students, who were often called the "Termites," into adulthood to examine the degree to which individuals with high IQs achieved success in life. He found the students tended to excel in their chosen careers, to have superior leadership abilities, and to be well-adjusted socially. Based on these findings, Terman suggested the importance of gifted education, which he described as the process of identifying gifted children early, providing them with specialized curriculum and instruction, and allowing them to develop their talents and interests.

In recent years, researchers and scholars have proposed broader definitions of giftedness, suggesting that high IQ alone does not necessarily define giftedness. For example, the Jacob Javits Gifted and Talented Students Education Act, originally passed by Congress in 1988 as part of the Elementary and Secondary Education Act, defines gifted and talented students as students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities. Therefore, while intelligence tests and IQ scores still play a large role in the identification of gifted individuals, more emphasis has also been placed on giftedness in areas outside of those typically assessed on standardized intelligence tests (e.g., creativity, artistic capabilities, and leadership skills). Increasingly, it is recognized that no single measure can identify giftedness, and that multiple measures, which may include portfolios of classroom work, classroom observations, achievement tests, and intelligence tests, are necessary to develop an understanding of the pattern of strengths and abilities demonstrated by gifted students.

In addition to debate about what skills and abilities define giftedness and about how to identify gifted individuals, there has also been debate about the best way to educate gifted students. For much of the twentieth century, little systematic attention was directed toward educating gifted students, despite recommendations by Terman and other researchers. During this period of time, more attention was directed toward equity in the public school system. However, when attention began to be directed toward excellence in education, such as after the launch of the Soviet satellite Sputnik in 1957 and after the release of the report, *A Nation at Risk* in 1983, both of which criticized American public education for not holding students to high standards and for not fostering the development of gifted students, more attention and resources were devoted to gifted education. As a result, during the later part of the twentieth century, several models for gifted education emerged and were implemented in the public schools.

Typically, it is assumed that gifted students should receive a differentiated program, or a program that differs from the typical education program. This differentiation is often accomplished by: changing the learning environment, changing the curriculum content, or fostering the development of cognitive or learning strategies. The most commonly used technique for changing the learning environment has been to accelerate the student through their education. For example, a gifted student may skip grades or may be placed in a special class that presents material more quickly than the typical classroom. When changing the curriculum content, the content that is taught to all students is adapted to provide more appropriate learning opportunities for gifted students. For example, more sophisticated and complex applications of the content may be presented to gifted students so that they can extend what they are learning to other areas and think about novel applications of the content to problems or issues in society. Or, enrichment activities may be provided, where students have unique opportunities to apply and integrate the curriculum content. Finally, fostering the development of cognitive or learning strategies focuses on teaching gifted students how to deal with complex problems and how to generate innovative solutions. For example, in this approach rather than focusing on a typical math problem, students might be given a more complex problem with a real-world context. Students would then work to generate solutions that integrated knowledge from diverse areas. These types of learning strategies focus on helping students to develop strategies to organize their vast knowledge and to apply their knowledge to real-world contexts to solve complex problems. One or more of these techniques may be used to create differentiated programs for gifted students.

Another growing focus within gifted education programs is building on students' strengths and talents. For example, enrichment activities and learning strategy instruction for a student that demonstrates giftedness in the arts may focus on activities related to the arts as well as the integration of the arts with the other curriculum content areas – math, science, etc. Finally, there is a growing focus on supporting students to think about how they can apply their knowledge in novel and innovative ways. Rather than an exclusive focus on deductive-reasoning, there is a growing focus on the development of knowledge within a social context and the application of knowledge to social problems.

In 1993, another report to Congress, *National Excellence: A Case for Developing America's Talent*, brought increased attention to the social and emotional needs of gifted students and to the underidentification of culturally and linguistically diverse students in gifted programs. Since this time, increased attention has been directed to each of these areas. Throughout the history of gifted education there has been debate about the degree to which gifted students have special social and emotional needs. While Terman suggested that gifted students were as well-adjusted as their peers in adulthood, other researchers have suggested that gifted students faced significant difficulties interacting with their peers and often experience social and emotional difficulties. Today, it is generally accepted that gifted students are at least as well adjusted socially as any other group of children and youth, but

that unique situations do arise for gifted students that can put them at risk for social and emotional problems. For example, gifted students who are not challenged during their education may be more likely to underachieve and to experience social and emotional problems. In addition, some gifted students may appear very different from their peers because of their abilities and may be at risk for having few peers and feeling pressure to conform. Without support, such students may hide their talents or become introverted and less socially adept. However when appropriate educational experiences are provided and when gifted students are supported to find intellectual peers (e.g., through acceleration or special programs), gifted students tend to be well-adjusted and to fare well in life.

With regards to the underidentification of culturally and linguistically diverse students in gifted programs, significant attention has been directed toward the importance of culturally sensitive assessments, multicultural education, and education for professionals on cultural diversity and the influence of culture on the definition and assessment of giftedness. For example, a common criticism of standardized IQ tests, which remain a primary way in which gifted students are identified, is that they ignore the strengths of students who are culturally and linguistically diverse or who are poor test takers. Further, students are often referred for gifted education based on achievement. However, this ignores the motivational factors that may impact a student's achievement. For example, a gifted student, if not supported to develop their talents, may begin to underachieve in school. Their giftedness, therefore, may not be recognized and supported. Such issues may be more likely to affect culturally and linguistically diverse students.

SEE ALSO: ► Environmental resources ► Intelligence ► Positive youth development

## Global Well-Being

Raksha Arora, Jim Harter, and Gale D. Muller

*Gallup*

Global well-being is defined by the growing institution of data that counts, sorts, records, and analyzes virtually all topics affecting all aspects of life for the benefit of the 6 billion people of the world and those who lead them.

Traditional measures of well-being include economic indicators such as gross domestic product (GDP) as well as social indicators such as poverty rates, healthcare expenditures, and literacy levels. While GDP is the most prominent among these, Nobel laureate Simon Kuznets, who invented its predecessor, gross national product (GNP), never quite intended it to be the de facto measure of national welfare that it has become today.

Mahbub ul Haq, who created the United Nations Human Development Index (HDI) as an alternative to GNP, made a compelling statement about the

limitations of income-based measures when he wrote that “Any measure that values a gun several hundred times more than a bottle of milk is bound to raise serious questions about its relevance for human progress” (ul Haq, 2003, p. 127). The HDI was intended primarily to shift the dialogue away from income-based measures of development rather than to provide an authoritative measure of human welfare and was extremely successful in doing so. However, HDI, like most composite social indicators, suffers from the somewhat arbitrary choice and weighting of its constituent parts.

The science of subjective well-being fills this lacuna by providing a representative measure based on self-reported survey data and in doing so, it offers a broader alternative to the income/social indicators view of welfare that has been in favor with economists. In 1974, the economist Richard Easterlin described unchanging levels of self-reported happiness in the United States despite the postwar economic boom. And the so-called Easterlin paradox and the related research examining the link between well-being and income, in recognizing the contribution that subjective well-being can make to the dismal science, formed the cornerstone of the now burgeoning field of happiness economics. More specifically, research conducted by behavioral economists, using the best methods from the social sciences of psychology and economics, has clarified modern conceptualizations of well-being and has better operationalized absolute income, relative income, and other markers of wealth.

The subjective well-being literature is multidisciplinary and present-day conceptions of subjective well-being are broadly categorized as belonging to the hedonic or the eudaimonic school of thought. With etymological origins in the classical Greek word for happiness and philosophical roots in the work of Aristotle, the eudaimonic school defines well-being as a function of self-actualization, virtue, meaning, purpose, or some such normative or moralistic construct. The hedonic view of well-being advocated by Epicurus and the utilitarian philosopher Jeremy Bentham, among others, became prominent in the 18th-century Enlightenment and has remained the popular ideal of well-being ever since. Nobel laureate Daniel Kahneman and University of Illinois psychology professor Ed Diener have been influential in conceiving the contemporary view of hedonic well-being through their work on hedonic psychology, the study of what makes experiences and life pleasant or unpleasant, of what contributes to suffering and joy. Diener further delineates the cognitive (such as life satisfaction and work satisfaction) and affective dimensions (aspects of joy and sadness) of subjective well-being concept.

Kahneman makes particular note of the distinction between experienced well-being/objective well-being and evaluative well-being. *Experienced well-being* is concerned with momentary affective states and the way people feel about experiences in real-time, whereas *evaluative well-being* is the way they remember their experiences after they are over. This dimension of well-being could also include individual assessments of specific life domains such as one’s standard of living, housing, job, marriage, and personal health. Experienced well-being, on the other

hand, seeks to bypass the effects of judgment and memory and is measured using the Experience Sampling Method or the Day Reconstruction Method, both of which seek to capture feelings and emotions as close to the subject's immediate experience as possible.

Well-being scholars rely primarily on self-report data obtained from probability samples of populations. And while something is known about the nature and predictors of evaluative well-being within countries, across nations, and over time, the understanding of experienced well-being in large populations is at a nascent stage. Additionally, most cross-national surveys of evaluative well-being have focused on narrow subsets of countries or lack contemporaneous data for the countries surveyed. For example, the International Social Survey Program includes about 40 countries, the Pew Global Attitude Survey studies about 50 countries, Transparency International Global Corruption Barometer surveys 60 countries, and even the famous World Values Survey is limited to about 80 countries. There are more than 190 member countries in the United Nations and more than 200 countries in total. There are more than 150 countries with populations of more than 1 million people, and approximately 140 with populations with more than 2 million. Even the most ambitious of all multination studies include only half (or less) of all countries. In addition, the studies usually include more developed countries with well-developed data collection systems and a limited number of developing nations where data collection systems are less well developed. Finally, in many cases, data collection in some hard-to-research nations includes only a portion of the country: major cities, higher-income areas, or areas that are least dangerous or easiest to access. In contrast, the newly instituted Gallup World Poll is truly multinational in its scope and aims to continually survey more than 130 countries using nationwide samples representing 95% of world's adult population.

Perhaps the most important contribution the Gallup World Poll makes to the study of well-being is that it measures a form of experienced happiness. Experienced happiness is typically measured in real-time using the Experience Sampling Method or Day Reconstruction Method. However, Gallup, inspired by the work of Kahneman, has modified these methods to a large-scale survey environment by framing a battery of emotion questions within the context of the last 24 hours. The battery is introduced by asking the respondent to "Please think about yesterday, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt." The respondent is then asked a series of questions that relate to experiences of positive and negative emotions, including feelings of enjoyment, pride, worry, sadness, depression, and anger. See Figure 5 for a sample of well-being questions from the Gallup World Poll.

In addition, the Gallup World Poll allows an extensive context in which to study well-being by providing a diverse range of subjective social, economic, and political indicators (measures of basic needs, crime victimization, safety, health, employment, work, respect, citizen engagement, and national leadership, among others)

**Evaluative Well-Being:** Gallup measures life satisfaction by using a Self-Anchoring Striving Scale (Cantril, 1965), which represents life as a ladder with steps numbered from 0 to 10, where 0 indicates the worst life possible and 10 the best possible life. Survey responses are anchored around which step of the ladder an individual says he or she stands on at the present time, with follow-up questions as to where one stood five years ago and which step one expects to stand on five years from now. The temporal dimensions of the Cantril ladder provide insight into the direction of movement in well-being and aspects of well-being such as hope and optimism.

- On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel?

**Experienced Well-Being:** Questions pertaining to emotions experienced within the context of the last 24 hours

**I.** Please think about yesterday, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt:

- Would you like to have more days just like yesterday? (Yes/No)
- Did you feel well-rested yesterday? (Yes/No)
- Were you treated with respect all day yesterday? (Yes/No)
- Were you able to choose how you spent your time all day yesterday? (Yes/No)
- Did you smile or laugh a lot yesterday? (Yes/No)
- Were you proud of something you did yesterday? (Yes/No)
- Did you learn or do something interesting yesterday? (Yes/No)
- Did you have good-tasting food to eat yesterday? (Yes/No)

**II.** Did you experience the following feelings during A LOT OF THE DAY yesterday? How about:

- Enjoyment
- Physical pain
- Worry
- Sadness
- Boredom
- Depression
- Anger
- Love

**Figure 5** Well-Being Questions from the Gallup World Poll.

*Source:* From the Gallup World Poll

that are collected together with the well-being data. To further facilitate cross-cultural comparisons of well-being, the Gallup World Poll uses a dichotomous response scale. This addresses possible contamination of data due to cultural differences in response styles, which ordinal scales are sometimes susceptible to.

The level of economic development of societies and the performance of governments, corporations, and institutions have long been measured by objective indicators such as GDP, profitability, literacy, and life expectancy. But far less is known about qualitative aspects of human development or, for that matter, the effects public and private agencies have on the subjective experience of their constituencies. Given the advances in theory, research, and measurement coverage throughout the world, it is now possible to view global well-being through a wider lens, taking into account various forms of subjective data that can compensate for measurement gaps that have in the past limited our view of human development.

SEE ALSO: ► Gallup ► Gallup World Poll ► Kahneman, Daniel  
► Well-being

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## Goals and Goal-Setting Theory

Anne S. Beauchamp  
*University of Kansas*

*Goals* are objectives or purposes of action. *Goal-setting theory* is intended to describe the process of consciously setting performance goals and its influence on performance behaviors and outcomes. Just prior to the emergence of goal-setting theory, in the 1950s and 1960s, the psychological approach to explaining actions was dominated by behaviorism. This view emphasized external influences on behavior to the exclusion of internal mechanisms. A concurrent approach to explaining behaviors relied on internal, nonconscious drives or needs as the source of motivation. These drives include need for achievement, affiliation, and power, among others. The main theorist behind this approach, David McClelland, and his student, John Atkinson, asserted that needs are not consciously accessible and measured needs using projective tests. In contrast to these approaches, goal-setting theory is focused on consciously accessible and controllable internal goals.



Beginning in the late 1960s and early 1970s, Edwin A. Locke, Gary P. Latham, and their colleagues conducted empirical investigations and theoretical work leading to the formulation of goal-setting theory. Locke and Latham reviewed theory development and empirical support in an article published in 2002. An important aspect of this work has revealed that the highest or most difficult goals lead to the highest levels of effort and performance, within the limits of ability. Additionally, specific goals improve performance over encouragement to “do one’s best,” particularly when those specific goals are high.

## **Goal Mechanisms**

Goals support performance through four mechanisms. First, goals guide actions by directing attention and effort toward relevant information and activities and averting attention and effort away from irrelevancies. This mechanism improves performance because time and effort are not wasted on extraneous activities. Second, goals serve an energizing function, with higher goals leading to increased effort. Thus, people tend to increase effort in order to meet the needs of goals. Third, goals improve persistence over time or, when time constraints are in place, goals increase intensity of effort. This aspect of goal-setting aids in overcoming obstacles during goal pursuit. Finally, goals support goal pursuit by facilitating the use of task knowledge and strategies at various levels.

When goals require engagement in familiar tasks, goal-setting improves accessibility of related knowledge and automated skills. For novel tasks that are similar to known tasks, goal-setting supports the transfer and application of skills related to the known tasks. Even when tasks are neither known nor similar to known tasks, goal-setting facilitates deliberate planning and development of task strategies. At times, the search for and development of task strategies can be as challenging as the task itself. In situations such as these, when the task is very complex, vague “do-your-best” goals can support performance better than specific goals that might intimidate the goal-seeker. However, when goal-seekers are trained in the proper task strategies, high specific goals can improve performance outcomes.

## **Goal Moderators**

The effect of goal-setting on performance can vary among situations or individuals based on several factors. The degree to which one expects to attain a goal can alter performance. For a given goal, the more strongly one believes the goal will be reached, the better one performs. However, higher goals tend to be associated both with lower expectancies and with higher performance. Thus, goals that are more challenging result in better performance even though they also result in lower expectancies. Similar to expectancies is self-efficacy, or confidence regarding a specific task. Increased self-efficacy regarding a task can lead people

to set higher goals, to apply better task strategies, and to respond to negative feedback with increased effort or changes in strategy. All of these outcomes of increased self-efficacy support goal attainment and performance. Self-efficacy can be bolstered through training with feedback, role modeling, and persuasion, including the confidence in others' abilities implied when leaders set high goals for others.

One's commitment to a goal supports goal attainment, especially in regards to very difficult goals. In addition to the factors just described, self-efficacy also increases goal commitment. Also, those who view the goal as important tend to be more committed. Goal importance can be increased in several ways. People who publicly commit to goals tend to view goal attainment as important. Some degree of participation, such as helping to set the goal or understanding the goal purpose and rationale, and collaborating to develop strategies, improves goal importance. Finally, leaders can impart the importance of a goal by supporting attempts to reach the goal, inspiring others to seek the goal, and providing incentives, including monetary incentives. It is important to note that the effects of incentives on performance depend on the extent to which they align with the goal-seeker's personal goals, existing goal commitment, and self-efficacy.

The availability of performance feedback influences the relationship between goal-setting and performance. Formative feedback improves performance during a task when progress is insufficient because the feedback leads to increased effort or a change in strategy. After a goal is attained and feedback reflects the success, that feedback encourages even more challenging subsequent goal-setting, which in turn leads to improved performance.

Finally, as mentioned previously, task complexity increases the difficulty of the task. Still, several factors can support the goal-performance relationship in highly complex tasks. Individuals skilled in identifying successful task strategies will be less affected by task complexity. Proximal goals that are set by oneself or others help maintain attention and effort levels during completion of complex tasks. Additionally, formative feedback helps goal seekers manage error. During goal pursuit, these supports reduce the negative effects of task complexity on performance.

## **Additional Outcomes of Goal-setting**

Although high goals tend to lead to high performance, those with higher goals tend to be less satisfied than those with lower goals. This is because goals define the level of performance at which one would be satisfied and below which one would be dissatisfied. Even high performance can lead to dissatisfaction if goals are higher than performance. However, this dissatisfaction does not dissuade people from setting high goals. People set high goals based on their expectations for psychological and practical rewards. Additionally, while high goals do not directly improve likelihood of satisfaction, they improve interest in the task and lead goal seekers to recognize the pleasurable aspects of goal-related activities.

High goals do, however, improve the likelihood of satisfaction indirectly through the high-performance cycle described by Locke and Latham. In this cycle, high goals lead to high performance which, when coupled with appropriate rewards, improve satisfaction and self-efficacy, encouraging the setting of higher goals. Alternatively, job satisfaction can improve organizational commitment. When that commitment includes high goals, performance can improve.

As much of this work has been conducted from an industrial/organizational psychology approach, several business- or work-specific outcomes of goal-setting have been identified. Specific, challenging goals substantially improve work performance. Examples of work settings in which this link has been identified include logging, truck loading, and word processing, as evidenced by improved productivity and reduced costs. Additionally, setting specific, challenging goals improved the performance appraisals of engineers, scientists, and telecommunication workers. The extent to which a job applicant is likely to engage in productive goal-setting at work can be assessed through situational interviews such as those developed by Latham, Saari, Pursell, and Campion. Goal-setting is also an important component of self-regulation. In work settings, goals have improved self-regulatory outcomes including attendance, team-playing skills, and communication skills. Likewise, goal-setting can contribute to improved performance in any self-regulated activity.

## **Future Directions**

Although the relationship between goal-setting and performance is clear, several aspects of goals complicate the relationship and require further research. First, individuals may hold goals that conflict with each other or that conflict with organizational or group goals. In these situations, performance weakens. Future studies may reveal particular types of goals that conflict with or enhance each other, as well as the mechanisms of goal pursuit under conflict. Second, many personality traits, such as achievement motivation, conscientiousness, and goal orientation, have been shown to influence performance. These relationships may be better understood by examining the role of goal-setting as mediator.

Finally, while goal-setting theory centers on consciously-set goals, subconscious cognitions may influence the relationship between goals and performance. For example, subconscious motivation may moderate the relationship. Additionally, individuals may hold subconscious goals alongside conscious goals. These goals may support or inhibit the pursuit of conscious goals. Additionally, a good deal of cognitive psychology research has been conducted examining the nonconscious aspects of goal pursuit. As this literature is integrated into the goal-setting theory literature, the influence of nonconscious processes in applied self-regulatory settings will be illuminated.

SEE ALSO: ► Hope ► Prevention focus ► Promotion focus  
► Self-regulation

## Good Life

Brian P. Cole

*University of Kansas*

While there is no universal definition, the *good life* is generally considered a life of optimal functioning and/or flourishing. Across time, culture, and religion, views of the good life vary. Eastern philosophy and religion provide several notions of the good life, and contemporary psychologists continue to debate the concept. Despite many differences, there tends to be a common theme of an optimal life that occurs through a spiritual journey involving transcendence and enlightenment.

The tenets of Confucianism describe in detail the virtues that one must strive to attain. These virtues include *jen* (humanity), *yi* (duty), *li* (etiquette), *zhi* (wisdom), and *xin* (truthfulness). Confucius deemed *jen* to be the most exalted virtue in that it encapsulates the other four virtues. *Yi* describes the appropriate treatment of others, while *zhi* and *xin* describe the importance of wisdom and truth. By striving to make wise decisions while being true to these virtues, one can reach enlightenment, or the good life.

Buddhism also places high importance on a life of virtue. Buddhists speak of the *Brahma Viharas*, virtues that are above all others in importance. These virtues are *maitri* (love), *karuna* (compassion), *mudita* (joy), and *upeksa* (equanimity). To achieve these virtues, followers of Buddhism are required to divorce themselves from the human emotion of desire in an effort to end suffering.

The main teachings of Hinduism teach interconnectedness and harmony among all individuals. Upon death, there are two possible paths. The first is reincarnation (being reborn to continue seeking enlightenment), the second is going to the afterlife (indicating that enlightenment and the highest possible levels of knowledge have been reached). Hindu texts indicate that one should strive to live life to the fullest and in the right way if they wish to reach the afterlife. Unlike the majority of virtue ethics (which are mostly collectivist), the ultimate goal in life is to attain self-knowledge and to become the best possible version of one's self. That being said, being good to others is encouraged throughout the process. "The good life in the Hindu tradition, therefore, encompasses individuals who are continually achieving knowledge and continually working toward good actions" (Snyder & Lopez, 2007, p. 42). While there are striking differences in the notion of what it takes to lead a good life among Confucianism, Buddhism, and Hinduism, there are several key similarities. Each of these philosophies discusses the importance of virtue in the journey to the good life.

The good life can be broken down into moralistic and hedonistic views. Within the moralistic view, the good life is reached by following rules, tenets, laws of behavior (e.g., The Ten Commandments) and ideals. Calvinists and Protestant Christians hold a belief that hard-work, self-sacrifice and care for others are keys to finding the good life through a doctrine of "good works." Early Western philosophers including Socrates, Plato, and Aristotle wrote of *eudaimonia*, a condition

in which a person reaches a better state of being by use of knowledge and virtue. “The eudaimonic approach views well-being in terms of self-realization and growth (which includes pleasure but is not focused primarily on it). Well-being increases as one becomes increasingly more capable of living out particular, universally beneficial human qualities” (Bauer, McAdams, & Sakaeda, 2005, p. 205).

Socrates’ adage “Know thy self” serves as a reminder that knowledge of one’s strengths and weaknesses, values, and goals is necessary to reach the state of eudaimonia. Aristotle believed that eudaimonia was the ultimate goal of human existence. The path to eudaimonia required a balance in life. This balance included aspects of meeting (rather than exceeding) needs for survival, a belief that “real goods” (e.g., food, water, education, health), are more important to happiness than apparent goods (e.g., luxury items), which in some cases may hinder happiness. Additionally, Aristotle felt that one must possess desires for positive leisure activities such as learning, which helps one to develop the skills necessary to reach eudaimonia, or what modern society would see as the good life.

Eudaimonia is often translated as happiness, but it is more accurate to describe it as striving toward one’s true potential. Living in an effort to reach one’s full potential and purpose is not always pleasant. While certain life experiences on the road to the good life may not result in happiness, they often lead to growth, a sense of meaning or purpose, or mastery of tasks. Unlike the hedonic view, effort often plays a role. In pursuit of true potential, people will seek out opportunities that become increasingly challenging (stretch goals). This leads to gradual increases in their competence. Rather than viewing eudaimonia as the presence of positive emotion, emphasis should be placed on the degree to which a person is fully functioning and flourishing.

Within the hedonistic view, the good life is one that is full of enjoyment and pleasure, often with little or no effort. Aristotle felt that hedonic happiness was vulgar and made humans slaves to their desires. The hedonistic view is similar to the view of parts of Western culture, in which the good life is often defined by money, power, and success. Despite the belief that people are driven by an urge for pleasure, research indicates that greater levels of satisfaction can be experienced upon the completion of tasks that require effort and physical or emotional sacrifice in the present, and that serve to develop skills and strengths for future use.

In the realm of positive psychology, there is great debate regarding the components and definition of the good life. In addition to Eastern and Western philosophy, the current conception of the good life is built upon the ideologies of Carl Rogers (client-centered therapy) and Abraham Maslow (self-actualization) and self-determination theory, as well as research on the identification of character strengths, engagement, flow, and well-being. A central aim of Rogers’ client-centered therapy is to help individuals improve their functioning by discovering and expressing their authentic selves. Maslow also believed in this process of self-actualization (which is the result of having access to the full range of one’s talents and abilities). Self-determination theory posits that self-realization is key to well-being and a good life. Fulfillment of our needs for autonomy, competence,

and relatedness lead to psychological growth, integrity, well-being, vitality, and self-congruence.

Seligman defined the good life as “identifying one’s signature strengths and virtues and using them in work, love, play, and parenting to produce abundant and authentic gratification” (Seligman, 2004, p. 85). This state of gratification occurs as a result of *flow* which is characterized by “complete absorption in what one does” (Nakamura & Csikszentmihalyi, 2005, p. 89). When in flow, a person is forced to draw upon his or her strengths to become fully engaged in a task. Flow is not always pleasurable (as it sometimes requires effort, struggling, and pain), but it leads to a gratifying event which contributes to finding the good life. Thus “interventions that increase the good life identify participants’ signature strengths and use them more often and in creative new ways” (Seligman, Parks, & Steen, 2004, p. 1380). Critics of this definition of the good life feel that it fails to fully describe the human condition because it lacks a moral compass. Others feel that this definition more appropriately describes the engaged life. One common theme that can be taken from this theory is the vital role of knowing and incorporating one’s strengths into everyday life.

Because each individual takes his or her own route to his or her own vision of the good life, there cannot be a universal definition. Common components have been identified through exploration of ways in which lay people define it. These components include happiness, meaningfulness, engagement, sense of purpose, wisdom, creativity, accomplishments, fulfilling personal relationships, and a personal philosophy on life. Research indicates that happiness and meaning are much larger indicators of the desirability and perceived quality of life than money. Beyond what is needed to afford life’s necessities, additional income has little effect on happiness. Additionally, work was only found to be a vital component of the good life when the work itself provided intrinsic fulfillment.

The role of well-being in the pursuit of the good life is also debated. Research indicates that folk concepts of the good life are similar to the concept of subjective well-being (SWB) in that happiness and meaning were the most popular defining characteristics of the good life. Others have posited that SWB is somewhat hedonistic and that the good life in the eudaimonic sense is more closely related to psychological well-being (PWB) in that it includes distinct aspects of self-actualization: “autonomy, personal growth, self acceptance, life purpose, mastery and positive relatedness” (Ryan & Deci, 2001, p. 146) which leads a person to a life of flourishing. Others feel that SWB and PWB complement each other and lead to congruence, making one more likely to achieve the good life.

The various definitions of the good life lead to problems for those seeking to achieve it. The concepts of well-being, flourishing, flow, and identifying and building strengths are not common knowledge, and in some cases run contrary to societal norms. This makes it difficult for people to strive for the development of an enduring good life of self-actualization and flourishing, rather than a temporary, ethereal one that only exists in very specific situations or with specific luxury items, wealth, power, or success.

The current emphasis of research in this area includes the study of flow, identifying universal strengths and virtues, integrating the good life and strengths building into therapy, examining the roles of effort, money, and education, the desirability of a life of ease versus a life of engagement, age related differences, and the roles of psychological well-being and subjective well-being.

Future research should include the development of additional measurements that account for variance in age, culture, and socioeconomic status. Cross-cultural preventative and therapeutic techniques need to be developed, using the recently identified, universally accepted strengths and virtues (such as those presented by Peterson and Seligman in *Character Strengths and Virtues: A Handbook and Classification*). Interventions of various sizes, levels of engagement, and types of administration should be developed to find successful means for reaching the largest possible number of people in an efficient, yet effective manner. Researchers need to focus on understanding the behaviors and life choices of individuals in search of the good life. Several studies indicate that people know what it takes to make a life good, yet many fail to put this knowledge to use in their lives (e.g., accumulation of material wealth is deemed more important than developing a meaningful personal philosophy on life, most people spend much more time working than developing personal relationships).

Research indicates that life satisfaction is correlated with increased problem-solving ability, job performance, stress resistance, and better physical health. Additionally, income, intelligence, and education account for a relatively small percentage of variance in measures of subjective well-being. These findings provide an opportunity to reach out to people in a variety of lifestyles and situations to offer tools of change and the means to a good life.

SEE ALSO: ► Aristotle ► Eudaimonia ► Happiness ► Hedonics  
► Well-being ► Flow

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## Gratitude

Robert Emmons

*University of California, Davis*

Gratitude is a commonly experienced emotion. Gratitude can also represent a broader attitude toward life – the tendency to see all of life as a gift. Gratitude thus has various meanings, and can be conceptualized at several levels of analysis ranging from momentary affect to long-term dispositions. It has been conceptualized as an emotion, an attitude, a moral virtue, a habit, a personality trait, and a coping response. The word *gratitude* itself is derived from the Latin *gratia*, meaning grace, graciousness or gratefulness. All derivatives from this Latin root “have to do with kindness, generousness, gifts, the beauty of giving and receiving, or getting something for nothing” (Pruyser, 1976, p. 69). Feeling grateful was the third most common discrete positive affect experienced in a sample of older adults, reported by nearly 90% of those surveyed.

Some of the meanings of gratitude emerge within a religious context. The traditional monotheistic doctrine of God portrays God as the ultimate giver. Upon recognition of God’s outpourings of favor, humans respond appropriately with grateful affect, and gratitude is one of the most common emotions that Judaism, Christianity, and Islam seek to evoke and sustain in believers. Even though gratitude has a clear religious connotation, a distinction can be made between a transpersonal gratitude and theistic gratitude. Transpersonal gratitude *may* be gratefulness to a God, or to a higher power, but may also be directed toward the cosmos more generally. It is the gratitude that one feels when contemplating a starry sky or majestic mountain peak. Such a vast thankfulness, Nakhnikian contends, cannot be directed toward a person or even a supernatural agent and occurs in the absence of a belief that a favor has been intentionally conferred upon a person by a benefactor. The spiritual quality of gratitude is aptly conveyed by Streng (1989): “in this attitude people recognize that they are connected to each other in a mysterious and miraculous way that is not fully determined by physical forces, but is part of a wider, or transcendent context” (p. 5).

Although a variety of life experiences can elicit feelings of gratitude, prototypically gratitude stems from the perception that one has received a gift or benefit from another person. Grateful emotions and behaviors typically result from the perception that another person has intended to promote one’s well-being. Most existing theoretical treatments concur that gratitude is mostly under a specific set of attributions: a) when a benefit is evaluated positively; b) when the benefit that one has encountered is not attributed to one’s own effort; and c) when the benefit was rendered intentionally by the benefactor. Existing research suggests that gratitude is a typically pleasant experience that is linked to contentment, happiness, and hope. There is consensus that gratitude can be regarded as a moral emotion in that it leads to behavior intended to benefit others. The experience of gratitude results from acknowledging the “gratuitous” role sources of social support



may play in propagating beneficial outcomes in our lives. Gratitude aids in reciprocating kindness towards those who have been kind to us.

Gratitude may serve important functions in human beings' social and emotional lives. Recent work has suggested that gratitude is a reliable emotional response to the receipt of benefits, and that the experience and expression of gratitude may have important effects on behavior in the moral domain. From the perspectives of moral philosophy and theology, gratitude is seen as a human strength that enhances one's personal and relational well-being and is beneficial for society as a whole. McCullough, Kilpatrick, Emmons, and Larson theorized that gratitude is a moral affect – that is, one with moral precursors and consequences. They hypothesized that by experiencing gratitude, a person is motivated to carry out prosocial behavior, energized to sustain moral behaviors, and is inhibited from committing destructive interpersonal behaviors. Specifically, they posited that gratitude serves as a *moral barometer*, providing individuals with an affective readout that accompanies the perception that another person has treated them prosocially. Second, they posited that gratitude serves as a *moral motive*, stimulating people to behave prosocially after they have been the beneficiaries of other people's prosocial behavior. Third, they posited that gratitude serves as a *moral reinforcer*, encouraging prosocial behavior by reinforcing people for their previous good deeds. McCullough and colleagues adduced evidence from a wide variety of studies in personality, social, developmental and evolutionary psychology to support this conceptualization.

## Dispositional Gratitude and Positive Life Outcomes

Gratitude is also measured at the trait level. The *grateful disposition* is a generalized tendency to recognize and respond with positive emotions (appreciation, thankfulness) to the role of other moral agents' benevolence in the positive experiences and outcomes that one obtains.

Two self-report measures of gratitude as a personality disposition have been constructed: the GRAT (the Gratitude, Resentment, Appreciation Test) and The Gratitude Questionnaire (GQ). Items on the GQ reflect gratitude intensity (e.g., "I feel thankful for what I have received in life"), gratitude frequency (e.g., "Long amounts of time can go by before I feel grateful to something or someone"), gratitude span (e.g., "I sometimes feel grateful for the smallest things"), and gratitude density (e.g., "I am grateful to a wide variety of people"). Items on the GRAT tap appreciation of simple pleasures ("Often I think, 'What a privilege it is to be alive'"), a sense of deprivation ("I really don't think that I've gotten all the good things that I deserve in life"), and appreciation for others ("I couldn't have gotten where I am today without the help of many people"). Another measure assesses gratitude toward God, and includes item such as "I am grateful to God for all he has done for me" and "As I look back on my life, I feel I have been richly blessed by God"). These individual difference measures emphasize the emotional component of gratitude more so than the moral component of reciprocity.

People who score highly on measures of gratitude as an affective trait tend to experience a high degree of life satisfaction and positive affects such as happiness, vitality, and hope. They also experience relatively low levels of negative affects such as resentment, depression, and envy. McCullough and colleagues found that they also scored higher on measures of prosocial behavior, empathy, forgiveness, religiousness, and spirituality. Among the Big Five, the grateful disposition seems related most strongly to Agreeableness (positively) and Neuroticism (negatively). For people who are dispositionally prone to feel grateful, the amount of gratitude in their daily moods is determined so thoroughly by personality processes that their moods are resistant to the effects of gratitude-relevant daily life events (e.g., experiencing many discrete gratitude-eliciting events; experiencing gratitude to a large number of people) and their discrete emotional responses to these daily events (i.e., feeling intense episodes of grateful emotion in response).

At the dispositional level, grateful people report higher levels of positive emotions, life satisfaction, vitality, optimism and lower levels of depression and stress. Non self-report data indicate positive correlates and consequences of gratitude. The informants of people with strong dispositions toward gratitude reported that these grateful friends engaged in more prosocial behaviors (e.g., loaning money, providing compassion, sympathy, and emotional support) in the previous month than did the informants of less grateful individuals. Grateful individuals were also rated by their informants as engaging in supportive behaviors more frequently in general than did the informants of less grateful individuals. There is also some evidence that gratitude serves to inhibit destructive interpersonal behavior. As a social emotion, expressions of gratitude and appreciation are essential to successful, vital, and thriving long-term relationships.

So then, be it as a state or trait emotion, gratitude has clearly been linked to subjective-well being. Indeed, happy people tend to be grateful people. Moreover, expressing gratitude seems to intensify our already felt positive affect in response to being the recipient of a benefactor's kind behavior (e.g., giving a gift). "It is as if our enjoyment is incomplete unless some praise or gratitude is expressed to the source of our enjoyment" (Watkins, 2004, p. 167). Subsequently, capitalizing on positive experiences by processing them post hoc seems to be psychologically beneficial. Indeed, the ability to notice positive occurrences in one's life and to enjoy them allows us to have more fulfilling experiences. Gratitude is easily cultivated and is efficacious in kindling positive emotions generally and appears also to stimulate prosocial behavior including willingness to become an organ donor.

## **Gratitude and Resilience**

In addition to the positive benefits that can accrue from the conscious practice of gratitude, additional studies have shown that gratitude can buffer a person from debilitating emotions and pathological psychological conditions. Fredrickson, Tugade, Waugh, & Larkin examined the frequency of positive and negative

emotions before and after the tragic events of September 11, 2001. Out of 20 emotions, gratitude was the second most commonly experienced (only compassion was rated higher). They found that positive emotions were critical characteristics that actively helped resilient people to cope with the 9/11 disaster, suggesting another potential role that gratitude can play in interventions. Indeed, a whole line of research shows that benefit-finding can help people cope with disasters, deadly diseases, and bereavement. McAdams' analyses of redemption sequences revealed that even painful experiences could become something for which people are ultimately grateful. Thus, the regular experience and expression of gratitude can help build personal and interpersonal resources for coping effectively with stress and adversity.

Gratitude may also be a characteristic that offers protection against psychiatric disorders. A measure derived from a factor analysis of thankfulness (which included items explicitly related to gratitude, along with others that seemed to have more in common with love and acceptance) was associated with reduced risk for both internalizing (e.g., depression and anxiety) and externalizing (e.g., substance abuse) disorders in a study involving 2,616 male and female twins.

## Gratitude Interventions

From ancient scriptures to modern devotional writers, counting blessings is frequently recommended as a strategy to improve one's life. Considerable research has examined the ability of gratitude to produce positive psychological, interpersonal, and physical outcomes. These studies use random assignment to conditions and control groups. Gratitude interventions have shown that undergraduate students, adults with neuromuscular diseases, clinical patients suffering from depression and school-aged children have benefited from increased gratitude in their lives. Gratitude interventions, by increasing the intensity and frequency of grateful emotions, have been shown to have sustainable effects on emotional and interpersonal well-being, as well as physical health. Emmons and McCullough found that those who kept gratitude journals on a regular basis exercised more regularly, reported fewer physical symptoms, felt better about their lives as a whole, and were more optimistic about the upcoming week compared to those who recorded hassles or neutral life events. They also reported higher levels of high-engagement positive emotions, such as interest, excitement, enthusiasm, and vitality. A gratitude intervention with schoolchildren resulted in those keeping gratitude journals to be significantly more optimistic about their upcoming week compared to a hassles group. Within the school experience domain, the gratitude condition elicited greater satisfaction compared to both the hassles and control condition. Similar to the work on adults, counting blessings seems to be an effective intervention for well-being enhancement in early adolescents.

Still another gratitude intervention is the letter-writing exercise. Martin Seligman and his colleagues at the University of Pennsylvania had participants write and

then deliver a letter of gratitude in person to someone who had been especially kind to them or who made an enormous positive difference in their lives, but had never been properly thanked. At the immediate posttest (after one week of doing the assigned exercise), participants in the gratitude visit condition were happier and less depressed than before the assignment. This boost in happiness and decrease in depressive symptoms were maintained at follow-up assessments one week and one month later.

Expressing gratitude for life's blessings – that is, a sense of wonder, thankfulness and appreciation – is likely to elevate happiness for a number of reasons. Grateful thinking fosters the savoring of positive life experiences and situations, so that people can extract the maximum possible satisfaction and enjoyment from their circumstances. Counting one's blessings may directly counteract the effects of hedonic adaptation, the process by which our happiness level returns, again and again, to its set range, by preventing people from taking the good things in their lives for granted. If people consciously remind themselves of their blessings, it should become harder to take them for granted and adapt to them. And the very act of viewing good things as gifts itself is likely to be beneficial for mood. Lastly, gratitude enables people to feel more connected to and supported by others, and as such, can be thought of as a relationship-strengthening emotion.

## **Some Obstacles to Gratitude**

Any discussion of the benefits of gratitude would be incomplete without a consideration of factors that render gratitude difficult. Scholars have suggested that a number of attitudes are incompatible with a grateful outlook on life, including perceptions of victimhood, an inability to admit to one's shortcomings, a sense of entitlement, envy and resentment, and an overemphasis on materialistic values. Some of these obstacles are likely to be deeply ingrained in personality. A major personality variable that is likely to thwart gratitude is narcissism. People with narcissistic tendencies erroneously believe they are deserving of special rights and privileges. Along with being demanding and selfish, they exhibit an exaggerated sense of self-importance that leads them to expect special favors without assuming reciprocal responsibilities. The sense of entitlement combined with their insensitivity to the needs of others engenders interpersonal exploitation, whether consciously or unconsciously intended. In short, if one feels entitled to everything, then one is thankful for nothing. Interventions to cultivate gratitude cannot ignore these obstacles to gratitude for it may be necessary to confront these on their own terms prior to initiating a gratitude focus.

In the history of ideas, gratitude has had surprisingly few detractors. Aside from a few harsh words from a small handful of cynics, nearly every thinker has viewed gratitude as a sentiment with virtually no down-side. As Comte-Sponville (2001) recently pointed out, gratitude is "the most pleasant of the virtues, and

the most virtuous of the pleasures” (p. 132). It is virtuously pleasant because experiencing it not only uplifts the person who experiences it, but it edifies the person to whom it is directed as well.

But the fact that people typically consider gratitude a virtue and not simply a pleasure also points to the fact that it does not always come naturally or easily. Gratitude must, and can, be cultivated. And by cultivating the virtue, it appears that people may get the pleasure of gratitude, and all of its other attendant benefits, thrown in for free.

SEE ALSO: ► Empathy ► Happiness ► Religiousness ► Resilience  
► Spirituality

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## Growth Goals

Jack J. Bauer

*University of Dayton*

*Growth goals* are goals aimed toward personal growth. Generally speaking, goals organize behavior and help put personal desires, needs, and motivations into action. Goals vary in terms of content (what goals are about), structure (how goals are organized), and processes (how goals function and are implemented). What primarily distinguishes growth goals from other goals is a question of *content*. The content of growth goals deals with a desire for personal development over time. Growth goals come in different forms, but collectively they have been shown in research to have implications for health, well-being, adaptation, meaning-making, goal attainment, the formation of self and identity, task performance, personality, and development over time. Growth goals are viewed as central to the initiation of intentional self-development and personal growth.

## Theoretical Background of Growth Goals

Contemporary research on goals can be traced to giants in psychology's history who emphasized internally motivated actions and internally motivating needs, such as William James, William McDougall, Kurt Lewin, and Henry Murray. The history of *growth* goals, however, is more limited and recent. In the 1950s and 1960s, Abraham Maslow built a theory of human motivation around the idea of growth, claiming that in everyday events people are motivated by either growth or safety to varying degrees. Growth motivation involves an orientation to progress, explore, seek challenges, learn, integrate, and more fully maximize one's potentials. Safety motivation involves an orientation to preserve, conserve, protect, seek immediate comforts, maintain, and follow established action patterns. Toward the end of the twentieth century, Edward Deci's and Richard Ryan's self-determination theory translated a similar view of organismic growth into empirically testable terms, which has produced a large body of current research on growth-oriented goals. In another recent line of theory and research (notably, grounded in George Kelly's constructive alternativism), John Nicholls and Carol Dweck contrasted learning (growth-oriented) goals with performance (outcome- and validation-oriented) goals, which Dweck relates to people's "implicit theories" about whether personal characteristics are fixed or malleable. Similarly, a variety of growth-goal constructs that deal with cognitive growth have been operationally defined in terms of Jean Piaget's cognitive-developmental principles of assimilation and accommodation, though often cast in a more social-cognitive context than Piaget's original ideas. Other growth-goal research relies on Erik Erikson's psychosocial theory of personality development, with goals oriented toward psychological maturity in terms of identity, intimacy, generativity, and ego integrity. Finally, these approaches toward growth have been applied to numerous methodological forms for studying goals and related constructs that go by names such as *personal projects*, *personal strivings*, *current concerns*, *life tasks*, *major life goals*, and possible selves. Most empirically investigated forms of growth goals are consonant with one of these theoretical approaches, though these four in no way exhaust the possibilities for studying growth goals.

## Basic Properties of Growth Goals

All goals aim toward a desired future. But growth goals in particular emphasize a desire for a *personally meaningful*, *progressive process* over time. As for the notion of process, growth goals aim toward continual processes more than toward distinct products or outcomes at a single point in time. Furthermore, the desired process of a growth goal is one of progress, such that growth goals generally focus on the process of improving gradually over multiple points in time. Further still, the content of growth goals is not about just any kind of progress. Growth goals deal with progress in areas of life that are personally meaningful.

The term *personally meaningful* has many interpretations, but research on growth goals has generally defined personally meaningful goals as goals that are self-motivated, as opposed to goals motivated by external controls like material rewards or social status. According to self-determination theory, a goal is self-determined if it involves actions either that are intrinsically motivating (i.e., that the person simply enjoys doing) or that the person has come to identify with as personally or ideologically valued. Thus, growth goals are generally about “personal growth,” given that research on personal growth has overwhelmingly framed progress in terms of psychosocial maturity and self-understanding rather than seeking heightened status and material gain. Importantly, the self-determined nature of growth goals does not imply selfishness but in contrast is associated with the development of the individual beyond egocentrism.

Finally, the underlying reasons or motivations for a goal, rather than the more ostensible type of goal, perhaps best reveal whether a goal involves growth or not (or degrees therein). Furthermore, people’s goals – especially long-term, major life goals – seldom have a single motivation. For example, a person might wish to become a lawyer for the purposes of both attaining status and doing challenging, interesting work. But research has shown that people portray certain motivations as stronger than others and that these emphases have implications for goal orientations, personality, development, well-being, and adaptation.

## Kinds of Growth Goals and Their Implications

A relatively simple framework can organize most kinds of growth goals. First, growth goals have been studied along two broad paths of psychological development: cognitive and experiential. Second, growth goals have been studied as having a particular psychosocial focus: agentic and communal. Cognitive growth goals can take an agentic or communal focus, as can experiential growth goals. However, most studies to date have focused on either the psychological paths or the psychosocial focus of growth goals, not both. Measures of growth goals have most commonly been studied in relation to measures that are salient to personal growth, such as meaning-making, well-being, personality characteristics, and goal attainment.

### Cognitive and Experiential Growth Goals

Cognitive growth goals generally aim toward the ability to think more complexly, whereas experiential growth goals generally aim toward the deepening of experience. (This framework falls along the lines of Seymour Epstein’s cognitive–experiential self theory, though research on growth goals generally has not applied this theory directly.) Research shows that individuals are oriented to varying degrees toward one, both, or neither, each with implications for different paths and degrees of personality development.

### Cognitive Growth Goals

A cognitive growth goal aims toward acquiring new conceptual perspectives as a primary reason for the goal (choosing a career, getting married, etc.). This goal for cognitive growth comes in many forms, such as aims toward heightened conceptual understandings of self, relationships, special interests in work or play, society and social systems, humanity and life generally, spirituality and metaphysical transcendence. Cognitive growth goals have names like *learning goals*, *exploratory goals*, *accommodative goals*, and *integrative goals*. Sometimes these kinds of goals are for the explicit purpose of ongoing personal growth, whereas other times they are for the purpose of making a major life decision or for turning a difficult life event into a developmental opportunity. In research exploring both cognitive and experiential growth goals, people tend to have fewer cognitive growth goals than experiential growth goals. In other words, people tend to describe their growth goals as aims for deepened experience more so than as aims for heightened conceptual understanding.

### Experiential Growth Goals

Experiential growth goals typically aim toward deepened experiencing (individual or social), such as matured emotional experience (defined in many ways), more pervasive sense of well-being, and heightened capacities to act according to one's values. The most widely studied form of experiential growth goals comes from research based on self-determination theory, notably in the work of Ken Sheldon and Tim Kasser. Their work contrasts internally and externally motivated goals largely along humanistic versus materialistic values. Internally motivated goals (also called *self-concordant* or *congruent goals*) aim toward personal growth, meaningful relationships, and contributing to society, whereas extrinsic goals aim toward attaining money, status, and appearances. Experiential growth goals may have a cognitive-growth component (e.g., wanting to learn more about relationships), but not necessarily.

### Relations to Personality, Development, and Well-Being

Cognitive and experiential growth goals have been studied in relation to a range of measures of personality and development, notably higher levels of meaning and happiness in life. Meaning and happiness have been framed by Laura King as two facets of the "good life" and are primary concerns in people's efforts toward personal growth. Interestingly, research has consistently shown that intricate conceptual meaning and perceived happiness are not related; adults who can think complexly about their lives are just as likely to be happy as unhappy. Different kinds of growth goals seem to point down these two different paths of personal development. Cognitive growth goals correspond to heightened capacities for meaning-making, psychosocial maturity, moral reasoning, perspective-taking,



and purpose in life, but typically not to higher levels of happiness and well-being. In contrast, experiential growth goals correspond to higher levels of happiness and well-being but not to higher levels of meaning-making and perspective-taking. These relations become stronger in the presence of coherent hierarchies of growth goals (where short-term growth goals serve to implement long-term growth goals). A small body of longitudinal and cross-sectional life-span research suggests that specific kinds of growth goals may lead to specific, long-term paths of personality development. In addition to happiness and meaning, cognitive and experiential growth goals map onto different Big Five personality traits. Cognitive growth goals have been shown to correlate predominantly with openness to experience, whereas experiential growth goals correspond more to extroversion and lower neuroticism. Finally, both cognitive and experiential growth goals show a consistent relation to higher levels of goal attainment and task performance.

## Agentic and Communal Growth Goals

Whereas cognitive and experiential growth deal with the roughly thinking and feeling facets of growth, agentic and communal growth deal with the roughly intra-personal and interpersonal facets of growth. Agency and communion represent two broad facets of personal motivation. Agentic goals – though not necessarily agentic *growth* goals – aim toward things like power, mastery, achievement, and status. Communal goals – though not necessarily communal growth goals – aim toward love, intimacy, communication, ties to broader groups like society, and caring for others. Agentic or communal *growth* refers to personal growth (either cognitively or experientially) that is agentially or communally oriented.

### Agentic Growth Goals

Agentic growth goals do not involve a desire for progress in all or even most forms of agency. Many forms of agency are generally not growth-oriented by definition, such as seeking power and dominance over others, seeking money or other accomplishments for the purpose of social status, maintaining current levels of health (or anything else), regaining lost ground (as in recovery goals), or achieving higher degrees of appearances (physical, mental, social). The kinds of agentic goals that do involve growth include striving toward greater degrees of mastering the kinds of humanistic skills or conditions mentioned earlier and striving to have a positive impact in one's life in various ways (love, work, etc.).

### Communal Growth Goals

Communal growth goals generally involve a desire for progress in interpersonal relationships and group association, such as better relationships and stronger community involvement. However, communal concerns such as building relationships

for the primary purpose of gaining others' approval or support or for other ego-centric, self-protective reasons are generally not part of communal growth (again, the focus on growth rather than safety).

### Relations to Well-being and Meaning-making

Agentic growth goals have been shown to correlate modestly with well-being, whereas communal growth goals have been shown to correlate more strongly with well-being. (It is noteworthy that general agentic goals – not agentic growth goals – typically do not correlate with well-being, whereas general communal goals typically do correlate with well-being.) Some studies have shown that the capacity for both agentic and communal growth goals to predict higher levels of conceptual meaning-making increases when considering explicitly cognitive agentic or cognitive communal growth goals. Also, both agentic and communal growth goals correspond to higher levels of goal attainment and task performance.

## The Future of Growth Goals

Four likely directions for future work on growth goals are intentional self-development, posttraumatic growth, aging, and applications of growth goals.

Intentional self-development deals with personal growth, which is to say people's voluntary efforts to shape their own personalities and life course. A small but growing body of empirical evidence suggests that growth goals play an important role in intentional self-development. Coupled with the rapidly increasing body of research on goal structure (e.g., hierarchies of longer- and shorter-term goals) and goal processes (e.g., how short-term goal outcomes affect the flexible adaptation of long-term goals), knowledge of specific growth goals under various conditions holds great potential for a greater understanding of how people foster positive psychological development.

Posttraumatic growth is growth amid difficult life events such as loss and traumatic experiences. Whereas more traditional perspectives on adaptation to loss and trauma suggest that the most people can hope for is to return to normal, a growing body of research is showing that people not only adapt in that way but also perceive to have emerged with a strengthened sense of self and relationships, among other things. The role of growth goals – goals held explicitly to turn trauma into a developmental opportunity – has received little empirical attention but is likely to be part of the posttraumatic growth process. The small amount of evidence in this area suggests that growth goals are likely to function similarly under both traumatic and nontraumatic conditions in relation to meaning-making, well-being, and adaptation.

In the rapidly growing study of the positive psychology of aging, some researchers have found that older adults have higher levels of well-being than younger adults (at least in the form of lower levels of negative emotionality). Some studies have

shown that older adults are also more likely to have growth goals, a fact that accounts for a significant portion of the relation between age and heightened well-being. This runs contrary to the notion that older people plan less for future growth than younger people, a notion that also has considerable empirical support. Future research could tease apart these seeming contradictions.

Finally, growth goals can be applied to any domain of life. Growth goals can be applied in countless ways to all sorts of relationships, work-life, leisure-life, religious and spiritual-life, community-life, etc. Researchers and practitioners in all these areas have noted the importance of growth-oriented goals for positive outcomes and development.

SEE ALSO: ► Good life ► Intentional self-development  
► Personal growth initiative ► Posttraumatic growth ► Self-determination

# H

## Haidt, Jonathan

Thais Piassa Rogatko

*University of Maryland, Baltimore County*

Jonathan Haidt (born in 1963) is a social, cultural, and positive psychologist. He earned a BA in philosophy from Yale University in 1985. After working for 2 years as a computer programmer, he went to the University of Pennsylvania, where he completed a PhD in psychology in 1992. He then did two years of post-doctoral training in cultural psychology at the University of Chicago, during which time he conducted three months of research on morality in Orissa, India. He returned to the University of Pennsylvania for a third year of post-doctoral work under a grant from the MacArthur Foundation Health Program, working with Judith Rodin.

Haidt's research focuses on morality – its emotional foundations, cultural variations, and developmental course. He has also studied the desire for vengeance, and how moral emotions vary across cultures. He specializes in the study of “non-harm-based morality,” that is, in trying to understand why people care about other peoples' actions, even when those actions do not harm anyone else. This interest has led to several lines of work on the “negative” moral emotions, especially disgust, shame, and the desire for revenge.

More recently he has begun studying the “positive” moral emotions, such as admiration, awe, and an emotion he named “elevation,” which is a reaction to witnessing human moral beauty. Elevation appears to be triggered by seeing or hearing about people who do good, saintly, or self-sacrificing deeds. It generally causes a warm or glowing feeling in the chest, motivates people to do prosocial deeds themselves, and may be an important component of moral commitment and growth.

In addition, Haidt has created the “social intuitionist model” to describe the process of moral judgment. The model states that moral judgment is primarily a matter of quick “gut feelings,” which are later justified by ex-post facto moral reasoning. It has been established that moral reasoning and moral action are related. For example, Haidt’s model relates to Batson’s empathy–altruism hypothesis, which states that empathy aroused by seeing someone suffering leads to an altruistic motivation to reduce their suffering. Haidt’s model contributes to positive psychology because it explains how people make moral judgments, which may then influence their moral behavior.

Haidt is currently developing a comprehensive theory about the “five foundations” of human morality, which describes the building blocks of morality given to us by evolution and the cultural and developmental processes by which diverse moralities are created. He is applying this theory to understand political divisions in the United States. In 2001, Haidt published a study in which liberals and conservatives were interviewed about sexual morality in order to understand their differences and make suggestions for calming the culture wars over homosexuality.

Haidt is the 2001 winner of the Templeton Prize in Positive Psychology for his work on moral intuition and the emotion of elevation, and a 2004 winner of the Virginia “Outstanding Faculty Award,” conferred by Governor Mark Warner. He has also received awards from the H. F. Guggenheim foundation and the Fulbright Program.

Haidt has published a book, *The Happiness Hypothesis: Finding Modern Truth in Ancient Wisdom*, about positive psychology and the scientific study of human flourishing. His book has been published in four countries, and is allowing the research on happiness and positive psychology to be disseminated to a large body of people worldwide. Haidt also coedited the book, *Flourishing: Positive Psychology and the Life Well-Lived*.

SEE ALSO: ► Awe ► Culture ► Evolutionary psychology ► Flourishing  
► Moral judgment

## Happiness

Jeffrey J. Froh  
*Hofstra University*

*The Constitution* only gives people the right to pursue happiness. You have to catch it yourself. (Benjamin Franklin, *Benjamin Franklin Quotes*, n.d.)

Happiness comes from spiritual wealth, not material wealth. . . . Happiness comes from giving, not getting. If we try hard to bring happiness to others, we cannot stop it from coming to us also. To get joy, we must give it, and to keep joy, we must scatter it. (John Templeton, *Heart Quotes*, n.d.)

## What is Happiness?

Happiness is primarily a subjective phenomenon “for which the final judge is whoever lives inside a person’s skin” (Myers & Diener, 1995, p. 11). The ancients believed happiness was not achieved, but either god-given or due to chance. If happiness was experienced, it was not a function of the individual but rather was generously bestowed upon them by the cosmos. At some point in time happiness did change from a divine gift to a self-evident truth. Enlightenment thinkers believed that happiness could be attained in *this* life. If one were not happy, the logic went, the prescription was to alter one’s beliefs, customs, government, or living conditions. Happiness as a self-evident truth is reflected in *The Constitution* and remains today. Peruse the self-help section of a local bookstore, and books on happiness abound. But is being happy as easy as people are led to believe?

People typically equate happiness with the yellow smiley-faced icon. Happiness, many maintain, is about feeling “good.” It is about massages, lazy Sundays, and poolside margaritas. Hershey’s has even recently marketed a dark chocolate bar that has *happiness* imprinted all over it. Consumers are presumably meant to believe happiness will engulf them with each morsel. After all, eating chocolate *is* followed by joy. However, happiness is not solely synonymous with intense pleasure; that is too shallow a conceptualization. Happiness is much deeper.

Aristotle’s notion of *eudaimonia* is an example. *Eudaimonia* (i.e., happiness) comes from the Greek *eu* (good) and *daimon* (God, spirit, demon). Aristotle maintained that *eudaimonia* comes from identifying one’s virtues, cultivating them, and living life in accord. Happiness is beyond *feeling* good; it is about *doing* good. Cicero believed that “Gratitude is not only the greatest of virtues, but the parent of all others” (World of Quotes.com, n.d.). Therefore, to live a life of *eudaimonia*, an individual high in dispositional gratitude may embark on a gratitude visit or count their blessings. The grateful individual might send friends a handwritten letter indicating sincere appreciation for the gift bestowed upon him or her – lifelong friendship. Following such practices, the grateful individual has made a concerted effort in realizing his or her virtue of gratitude. Happiness is a natural byproduct, a gift in itself.

In 2002 Martin E. P. Seligman proposed a theory of happiness that is similar to Aristotle’s *eudaimonia*. According to Seligman, *authentic happiness* is achieved upon identifying and cultivating one’s signature strengths (e.g., curiosity, vitality, gratitude) daily in work, love, and play. Three distinct paths exist. The pleasant path involves experiencing positive emotions about the past (e.g., forgiveness, contentment), present (e.g., joy, ebullience), and future (e.g., optimism, hope). Those following the path of meaning typically report a robust attachment to something larger than themselves and have a strong sense of purpose in life. Finally, individuals traveling along the engaged path often report “being in the zone” or experiencing flow. The “full life” is realized when one is fully engaged on all three paths. In 2005, Christopher Peterson, Nansook Park, and Seligman investigated the

relationship between authentic happiness and life satisfaction in an Internet sample of 845 adults. Pleasure, meaning, and engagement all individually predicted life satisfaction. Both meaning and engagement were stronger predictors compared to pleasure. Indeed, either having a sense of purpose in life or experiencing flow were more important in terms of life satisfaction in contrast to living a life of pleasure. Of particular interest was the finding that respondents who self-reported to be high on all three paths to happiness reported the greatest life satisfaction (the “full life”), whereas those simultaneously low on all three paths reported the least satisfaction (the “empty life”). While temperance is 1 of 6 virtues in the classification manual of human strengths, it seems that to achieve authentic happiness, more is better.

Another conceptualization of happiness comes from the work of Ed Diener. Happiness, which he calls *subjective well-being*, is comprised of three components: a) frequent positive affect; b) infrequent negative affect; and c) high life satisfaction (i.e., the cognitive component). Though related, these three components appear independent.

Measuring happiness is typically accomplished via self-report. Sonja Lyubomirsky, Kennon Sheldon, and David Schkade maintained in 2005 that this seems appropriate and even necessary given the subjective nature of happiness. Though self-reported happiness is subjective, research supports using these measures in empirically investigating happiness for several reasons. First, subjective happiness is related to relatively more “objective” measures such as peer and family member reports of well-being, smiling behavior, ratings derived from clinical interviews, and physiological responses. Second, social desirability only modestly correlates with self-reported subjective well-being. Finally, subjective well-being measures demonstrate construct validity. In sum, researchers take seriously self-reported happiness, especially when supported by converging data with these other “objective” measures.

## What’s All The Buzz About Being Happy?

Definitions aside, happiness was not always a central focus in psychology. In a 2003 recount of modern life, Greg Easterbrook provided several intriguing hypotheses as to why happiness is a popular field of study in today’s psychology. Westerners may be suffering from *catalogue induced anxiety*. While objectively living a life the “greatest generation” could only dream (e.g., air conditioning, two cars per household, frequent dining out), in comparison to our neighbors, people may think they are “slumming it.” With McMansions (i.e., a house built on a large scale, but considered ostentatious) and “bloated homes” prolific in contemporary suburbia, a three-car garage seems essential. In this spirit, there also appears to be *the blurring of needs and wants*. As George Will aptly put, a need “is defined, in contemporary America, as a 48-hour-old want” (as cited in Easterbrook, 2003, p. 136). Here, the virtue of temperance seems helpful. Finally, *the nice-hotel room factor* is

paralyzing. While people have more personal freedom, Easterbrook argues, they work longer hours, many to support materialism. Longer office hours may breed feelings of isolation. Sure, the hotel room is gorgeous, but people are not having a good time because no one else came on the trip. Relatedness being a basic human need, conspicuous consumption can erode happiness. With depression having increased 10 fold since the 1950s and life satisfaction not budging (though real income has more than doubled), it is no mystery why happiness has become a hot topic.

## **Can We Make Ourselves Lastingly Happier?**

The objective indicators movement of the 1960s and 1970s investigated the relationship among happiness and demographic variables, such as age, sex, ethnicity, and education. Decades of research unequivocally show that demographics bear a smaller relationship with happiness than conventional wisdom may lead one to believe. In 1976 Frank Andrews and Stephen Withey determined that less than 10% of happiness could be explained by demographics while in 1984, Diener indicated 15%. In 2005 Lyubomirsky, Sheldon, and Schkade maintained that life circumstances, which include demographic factors, account for 10%. While demographics affect happiness, the impact is negligible.

Like most other psychological phenomena, genetics plays a role. In 2005 Lyubomirsky, Sheldon, and Schkade argued that happiness is partly determined by one's genetic set point. This central value within the set range is stable over time. So if one is jumping for joy today, he or she will likely be smiling from ear to ear tomorrow. In 1996, after examining twin and adoption data, David Lykken and Auke Tellegen concluded that happiness was 80% genetic. They maintained that becoming happier was as pointless as trying to be taller; conserve your energy. Lykken has since changed his view. He told *Time* in a 2005 special issue on "The Science of Happiness" that suggesting that increasing happiness was futile was a "dumb" statement. He now believes happiness can be changed for the better or worse. The more accepted figure for genetic contribution to happiness is now 50%. With demographics eating up 10% of the variance in happiness, and genetics devouring another 50%, people are gratefully left with 40% of wiggle room. The surest route to happiness is quality social relationships. With many today feeling overwhelmed and living through "just in time" schedules where every second is accounted for, resources are scant. If people aim to become happier as effectively and efficiently as possible, then people should put energy into family, friends, romantic partners, and colleagues. Researchers including Michael Argyle, Diener, Lyubomirsky, Seligman, and David Myers assert that social relationships may be the "greatest single cause" of happiness. In 1992 and 1999, Myers concluded that individuals in close relationships report better physical, mental, and emotional quality of life, as well as more adaptive coping responses to stress and adversity. If people aim to be happy, they should enjoy a latte at Starbucks while catching up with an old buddy. Social relationships matter!



In the late 1970's and early 1980's, Michael Fordyce attempted to empirically increase happiness with his 14 "fundamentals for happiness." Aside from cognitive interventions (e.g., "develop positive, optimistic thinking"), participants were instructed to "keep busy and be more active," "get better organized and plan things out," "spend more time socializing," and behave in ways consistent with the idea that "close relationships are the number one source of happiness" (1983, p. 484). Participants reported that although the cognitive interventions were extremely instrumental in enhancing their happiness, the other interventions related to socializing were also deemed just as effective. This was psychology's first glimpse at the powerful effects of volitional activity on happiness.

Lyubomirsky and colleagues are the prominent figures in uncovering the mystery to achieving sustainable happiness. Research demonstrates a strong relationship between kindness and self-reported happiness. When kind to others, we may feel a greater sense of interconnectedness, more confidence in our ability to help, and pride. Kindness seems like a perfect prescription for happiness. However, research by Jonathan Haidt and colleagues in 2002 (as cited in Haidt, 2003) demonstrated that the reverse may not be necessarily true – happiness is perhaps not the surest route to kindness. *Elevation* is a positive emotion described as a warm, uplifting feeling people experience when they see others unexpectedly act prosocially. College students induced to feel elevation reported wanting to help others more than students either induced to feel happy or neutral emotions. In a 2005 meta-analysis of over 300 happiness studies Lyubomirsky, Laura King, and Diener found that the relationship between kindness and happiness appears bidirectional. While kindness leads to happiness, happiness may also lead to kindness. If the goal is to increase kindness, data support inducing either elevation *or* happiness.

In 2004, Lyubomirsky, Chris Tkach, and James Yelverton experimentally investigated random acts of kindness. College students were randomly assigned to one of two conditions. Half were asked to perform five random acts of kindness a week for 6 weeks. Examples of such random acts included dropping coins into a stranger's parking meter, donating blood, or visiting a sick relative. The other half served as controls and just completed the measures at pre- and post-test. The controls experienced a decrease in well-being over the 6-week period and those who conducted random acts of kindness experienced a significant increase in well-being over the 6-week period. Being kind can feasibly make the person *and* the recipient happier.

Counting blessings has become a classic happiness intervention. Happy people are grateful people. In a groundbreaking study in 2003, Robert Emmons and Michael McCullough asked college students to count their blessings (i.e., keep a gratitude journal) on a *weekly* basis for 10 weeks. These participants exercised more regularly, reported fewer physical symptoms, felt better about their lives as a whole, and were more optimistic about the upcoming week compared to those who recorded hassles or neutral life events. When asked to count blessings on a *daily* basis for 16 days (only 13 were included in the observation period), college students who kept the gratitude journal reported higher levels of the positive states

of alertness, enthusiasm, determination, attentiveness and energy compared to a focus on hassles or a downward social comparison (i.e., thinking one is better off than others). Participants in the daily gratitude condition also reported more prosocial behavior, namely helping someone with a personal problem or offering emotional support, relative to the hassles or social comparison condition. This finding on prosocial behavior supports the broaden-and-build theory of positive emotions created by Barbara Fredrickson in 1998. According to Fredrickson, positive emotions broaden our thought-action repertoires and build enduring physical, intellectual, and social resources. Here, gratitude caused greater kindness and generosity. Over time, such altruistic behavior will likely build social resources via strengthening social bonds by fostering likeability from others that in turn increases the chances of receiving future aid through the norm of reciprocity. Finally these effects were replicated in adults with neuromuscular diseases over 3 weeks. Not only did patients who counted blessings indicate more positive affect and life satisfaction via self-report, but such advantages were also reported by their respective spouse or significant other. The powerful effects of gratitude seem to be both private *and* public.

Extending this work to early adolescence in 2007, Jeffrey Froh, William Sefick, and Emmons conducted a novel investigation. Classes of 7th and 8th graders were randomly assigned to one of three conditions: gratitude, hassles, or a no-treatment control. Those in the gratitude condition were asked to “count up to five things you are grateful for.” Students in the hassles group were asked to focus on irritants. Controls simply completed the measures. After 2 weeks of counting blessings, the gratitude condition was associated with enhanced self-reported gratitude, optimism, life satisfaction, and decreased negative affect. At the 3-week follow-up, students instructed to count their blessings showed more gratitude toward people who had helped them, which in turn predicted more gratitude in general. These results suggested that counting general blessings in adolescence may be related to appreciating specific gifts (e.g., gratitude for receiving aid) via priming them to acknowledge the specific instances of kindness in daily life. The most significant finding was the robust relationship between gratitude and satisfaction with school experience at both the immediate 2-week post-test and 3-week follow-up. Whether young, old, or coping with physical illness, saying, “thank you” is beyond manners.

With a proliferation of happiness interventions, how does counting blessings uphold against some of the other well-being techniques? In 2006 Sheldon and Lyubomirsky compared counting blessings, visualizing best possible selves (BPS), and life details in college students. The BPS exercise required participants to think of themselves in the future and consider having realized their life dreams. Controls given the life details exercise were instructed to write about the ordinary details of their life (e.g., attending class). The interventions and measures were completed at the pre-test and then again 2 and 4 weeks later. Participants were asked to continue with the exercises at least twice in between data collections. Results indicated that the BPS exercise may be better at raising and maintaining positive mood compared to the other two conditions. In this study, counting blessings came in second. It seems that engendering gratitude may be more difficult

to achieve compared to thinking about accomplishing life's goals. Cultivating happiness via counting blessings may be a path of greater resistance. If one is willing to work, do not throw in the towel. People should count blessings! But if the "just in time" schedule wears people out, then BPS may be the best bet.

## Future Directions

Experimental research by Lyubomirsky, Sheldon, and colleagues has moved happiness inquiry beyond the correlates to understanding the mechanisms, processes, and outcomes associated with sustainable well-being. Research in this vein should continue if the ultimate goal is not just to learn who is happy and why, but to identify scientifically proven paths to long-term well-being. Moderating variables such as personality (e.g., extroversion) and the person-activity fit should continue to be explored as these variables may provide insight into augmenting treatment effects. Diener and colleagues have advanced our understanding of happiness at the national level. Wealth, human rights, equality between people, the fulfillment of basic biological needs, individualism, political stability, interpersonal trust, and thinking happiness are important: all predict national happiness. With happiness being shown to *cause* successful outcomes (e.g., high salaries, good physical health, supportive social networks), policy-makers should consider making the assessment and promotion of their citizen's quality of life a national priority. Research on national well-being should continue and aim to isolate the effects of individual predictors. Finally, happiness research will advance if methodologically and statistically sophisticated techniques such as multivariate replicated single-subject repeated measures designs, experience sampling procedures, and analytic techniques such as multilevel modeling are used.

SEE ALSO: ► Authentic happiness ► Joy ► Life satisfaction ► Meaning  
► Positive emotions ► Well-being

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## Hardiness

Sylvia Xiaohua Chen

*The Hong Kong Polytechnic University*

Based on existential theory, hardiness represents a set of attitudes or beliefs conceptualized as courage and motivation to face stressful circumstances. According to Kobasa, hardiness characterizes individual differences in reactions to stressful life events. In positive psychology, hardiness has been identified as a strong correlate of subjective well-being and a pathway to resilience in the face of loss and trauma.

The construct of hardiness was proposed in a 12-year longitudinal study of managers at Illinois Bell Telephone from 1975 to 1986, conducted by Maddi and Kobasa with colleagues. Among middle- and upper-level executives with high levels of stress, individuals demonstrating hardy attitudes were more likely to remain healthy and continue to thrive. Ongoing research has indicated that hardiness enhances resiliency and buffers stress-illness relation in studies using retrospective and prospective designs.

As a personality trait predictive of health, performance, and conduct outcomes, hardiness consists of three dimensions termed the *three Cs of commitment* (vs. alienation), *control* (vs. powerlessness), and *challenge* (vs. threat). First, hardy individuals who are high in commitment tend to have a strong sense of purpose or meaning rather than experience alienation and isolation from people and events. Second, hardy individuals who are high in control try to influence their surroundings and outcomes of events with a sense of power rather than passivity and helplessness. Third, hardy individuals who are high in challenge perceive change rather than stability to be normal in life and anticipate changes as learning opportunities and incentives to growth rather than threats to security.

Critiques of early work on hardiness, however, raised both conceptual and methodological issues. It was argued that hardiness was not a unitary phenomenon, but a multifaceted personality construct, and that original studies on hardiness resulted from self-report data and samples of managers might not be applicable to other populations. The effects of hardiness were also questionable due to its mostly negative indicators and significant overlap with general maladjustment. Furthermore, critical analyses of the three hardiness subcomponents did not consistently show positive intercorrelations as predicted and not all subcomponents were systematically related to health outcomes. There have been mixed findings of its direct effects and moderating effects on stress and distress.

Later work concerning hardiness has identified the problems of measurement and attempted to establish its convergent and discriminant validity. Hardiness was initially assessed by the Personal Views Survey (PVS), with a combination of different existing scales. After revisions, the most recent version, the PVS III-R is an 18-item scale that generates commitment, control, challenge, and total hardiness

scores for research purposes. A more extensive test, the HardiSurvey III-R, is used for consulting purposes; 65 items tap the attitudes, coping strategies, and interaction patterns of hardiness, and generate a comprehensive report. Both tests can be administered in a hard copy form or on the Internet, with satisfactory reliability and validity. Other hardiness measures include the long and short versions of the Dispositional Resiliency Scale (DRS), a health-related hardiness scale, and a 45-item hardiness scale.

Studies on construct validation of hardiness have been conducted among various samples such as working adults, college students, and high-school students, supporting the utility of hardiness not only in stressful contexts but also in everyday functioning such as family life, work or school, retirement, and recreation. Hardiness has been found to associate positively with transformational coping (i.e., by solving problems and turning stress from adversity into growth opportunities) but negatively with repressive coping (i.e., by denying unpleasant emotions and avoiding stressful situations). Empirical evidence has suggested that hardiness is not redundant with neuroticism and negative affectivity. In comparison with other relevant concepts, hardiness is related to but distinguished from ego-strength, self-efficacy, optimism, resilience, religiousness, and others.

Building upon the view that hardiness is learned from life experiences and can be acquired through interactions with others and situations, Khoshaba and Maddi developed a training program targeted toward hardy attitudes and skills, including effective coping, social support, and self-care regimen. Small-group or one-on-one sessions and a workbook were designed to enhance problem-solving and stress management, giving and getting assistance and encouragement in social interactions, using relevant techniques of relaxation, nutrition and physical activity, and receiving feedback from these activities to facilitate better outcomes.

Over the years, various hardiness measures have been translated into 16 European, Asian, and Middle-Eastern languages, in addition to the original English versions. As hundreds of empirical studies and several review papers have been published on hardiness around the world, the significance of hardiness has been considered across demographics and cultures. Conceptually, hardiness is believed to be useful universally; thus, the role of hardiness ought to be consistent regardless of sex, age, and socioeconomic status and across individualistic and collectivistic cultures. Preliminary findings have shown some mean differences but no clear patterns differentiating the relevance and role of hardiness across demographic variables and cultural groups. Nevertheless, to establish the universality of hardiness, future research needs to examine its construct equivalence at different levels of comparability across cultures, especially in multicultural studies. More work is needed to explore the mechanisms underpinning its direct and moderating effects as well – for example, whether they are situation- or domain-specific – so as to bring together the vitality of hardiness in theory, research and practice.

SEE ALSO: ► Coping ► Courage ► Resiliency

## Harmony

Sylvia Xiaohua Chen

*The Hong Kong Polytechnic University*

Harmony is usually identified as a human value, referring to compatibility and accord in feelings, actions, relationships, opinions, interests, etc. It denotes a state of balance among forces influencing and even opposing one another. Psychologists have investigated both intrapersonal and interpersonal harmony, and attested to their relations with happiness and subjective well-being in empirical studies. Harmony has also been found to associate with the meaning of life, an important topic in positive psychology.

The notion of harmony can be traced back to Confucianism and Dao/Taoism in East Asia. In his famous work *Tao Te Ching* (*The Book of the Way and its Virtue*), Lao Tzu, an ancient Chinese philosopher, advocated living in harmony with nature to achieve balance and inner peace of mind. The Confucian classics also emphasized harmony as a guiding principle in interpersonal relationships and social roles, as it is essential to the stability of families and prosperity of human societies. East Asian countries – under the influence of Confucian doctrines – share this cultural value, as symbolized with their characters *he* in Chinese, *wa* in Japanese, and *inhwa* in Korean.

In contemporary psychology, *intrapersonal* harmony has been studied using value or personality assessment inventories. Both Rokeach's Value Survey (RVS) and Schwartz Value Survey (SVS) measure inner harmony as a human value. The RVS distinguishes 36 values into two types, namely instrumental and terminal, and categorizes inner harmony as a terminal value, that is, one of the desirable end states of existence or ultimate modes of living. The 57-item SVS groups ten value types on two basic bipolar dimensions, each comprising two higher-order value clusters: Openness to Change vs. Conservation, and Self-Transcendence vs. Self-Enhancement. Inner harmony, defined as peace with oneself, belongs to the value type of Universalism in the Self-Transcendence cluster. In contrast, the Chinese Value Survey (CVS), developed by Bond and colleagues, assesses "harmony with others" as a life value, whereas the Cross-Cultural Personality Assessment Inventory (previously named the Chinese Personality Assessment Inventory; CPAI), developed by Cheung and colleagues, measures harmony as a personality trait containing both intrapersonal and interpersonal components.

Researchers have used the RVS to examine value patterns across gender, ethnicities, and income levels, showing that inner harmony was ranked as one of the most important terminal values among groups with high sociometric level and some cultural groups, such as Australians and Brazilians. Gender differences have been found as well, with females rating inner harmony higher than males. Maintaining internal equilibrium promotes a sense of contentment, and thereby contributes to one's psychological adjustment and subjective well-being. For

example, Chen, Cheung, Bond, and Leung found that harmony, as measured by the CPAI-2, was significantly correlated with life satisfaction in Chinese culture.

For the most part, *interpersonal* harmony has been explored in the contexts of conflict avoidance, management, and resolution. Different models of harmony and theories of conflict management have been proposed in the East and the West. East Asian perspectives on harmony derive from Confucian ideology and cultural collectivism, but the dimensionality and focus are different across models. Hwang argued for two dimensions of harmony and conflict: ignoring vs. maintaining harmony, and pursuing vs. discarding goal. When collaboration is impossible but the relationship is important, the Chinese strategy to maintain harmony is to agree with the other party in public and yet pursue one's own goal in private. Huang distinguished two types of harmony, namely *genuine* and *surface*. Genuine harmony reflects a more sincere and compatible relationship, whereas surface harmony is more superficial, perhaps with hidden conflicts. Since it is difficult to achieve genuine harmony, surface harmony is considered as an alternative and tolerance as a strategy.

Gabrenya and Hwang reviewed the literature on Chinese social interaction, and Gao, Ting-Toomey, and Gudykunst reviewed Chinese communication processes. They both underscored the importance of harmony as a cultural ethic guiding social behaviors in Chinese societies. Likewise, G. M. Chen proposed a harmony theory of Chinese communication that views harmony as an end rather than a means. In pursuit of communication competence, harmony is achieved by internalizing the principles of *jen* (humanism), *yi* (righteousness), and *li* (rite), accommodating the components of *shi* (temporal contingencies), *wei* (spatial contingencies), and *ji* (the first imperceptible beginning of movement), and exercising the behavioral skills of *guanxi* (interrelation), *mientz* (face), and power.

To synthesize previous theories on harmony, K. Leung and colleagues have developed a dualistic model of harmony, incorporating the value perspective that views harmony as a goal and the instrumental perspective that views harmony as a means to an end. Accordingly, two dimensions have been conceptualized, viz., harmony enhancement and disintegration avoidance, with the former emphasizing the intrinsic importance and the latter stressing the practical importance of harmony. Based on this framework, four behavioral styles are mapped: disintegrating, aligning, smoothing, and balancing. Balancing value harmony and instrumental harmony, i.e., high on both dimensions, is a genuine harmonious relationship and ultimate goal.

The perspectives of Western scholars on harmony vary in nature and origin. In evaluation of cultural influences on conflict management, Kozan described three models: confrontational, harmony, and regulative. Of these, the harmony model is comparable to the East Asian perspectives, in which conflict is minimized and interdependence is emphasized to maintain group harmony, using nonconfrontational strategies and normative reasoning to resolve conflict. Earley employed the concept of harmony to examine organizational behavior across cultures. Built upon the East Asian theories, he regarded harmony as a dynamic process regulating

face via social interaction and exchange, and viewed balance and equilibrium in a nonstatic state. Nadar presented a different notion of harmony in her book entitled *Harmony Ideology: Justice and Control in a Zapotec Mountain Village*. Derived from Christian values and her field work in a Mexican village, harmony ideology is linked with conformity, power, and control, so as to preserve social order and social structure.

According to K. Leung and colleagues, harmony is relevant to but distinguished from a few concepts, e.g., face and guanxi. Face includes *lian* (moral face) pertaining to value harmony and *mientz* that focuses on public image or reputation. Earley suggested that each form of face was important to social interaction and thereby the dynamic process of harmony. Guanxi, denoting interpersonal connections, is more related to instrumental harmony, as it involves active development of one's social networks.

Although conceptually appealing, most aforementioned models and theories on interpersonal harmony have yet to be validated empirically. Studies, however, have adopted specific constructs to operationalize interpersonal harmony. Its correlates and effects on psychological outcomes have also been examined. One such construct is relationship harmony, as proposed by Kwan, Bond, and Singelis, to assess the balance achieved in one's close relationships. In their study, relationship harmony predicted life satisfaction above and beyond self-esteem among Hong Kong Chinese and European Americans. More work has been carried out among different age and cultural groups, demonstrating the significant contributions of relationship harmony to subjective well-being and psychosocial adjustment. Conversely, poor interpersonal relationships appear to result in depressed affect and negative self-assessments of one's life. Chen, Chan, Bond, and Stewart compared the relative importance of relationship harmony across gender and cultures, and concluded that its pathways leading to depressive symptoms were equivalent among males and females and across individualistic and collectivist cultures. Luo Lu and colleagues administered indigenous measures to test the linkage between relationship harmony and happiness. Harmony belief, as adapted from the CVS and the Traditional Values Scale, mediated the effect of interdependent self-construal on happiness with social interaction. Other studies tap into family harmony, especially marital and parental harmony, and confirm their relations with ego development, sex-role conception, and psychosocial adjustment among adults and children.

Morling and Fiske investigated another relevant construct, harmony control, in cultural contexts. It represents the interdependent self-view, connected with cultural collectivism but independent of traditional concepts of primary and secondary control. Harmony control characterizes accepting and adjusting to the surroundings, roles, and relationships as well as fate and luck. To certain extent, this notion parallels the Dao/Taoist philosophy advocated by Lao Tsu. It also aligns with the accommodative mode in Brandtstädter's dual-process model. The balanced interplay of the two adaptive modes, namely assimilative (i.e., tenacious goal pursuit) and accommodative (i.e., flexible goal adjustment), is considered to promote successful



aging with happiness and satisfaction and lead to desired growth and development through the lifespan.

Regardless of cultural origins, the conceptualizations of harmony are interrelated. Intrapersonal harmony emphasizes internal equilibrium and peace within oneself; i.e., harmony of inner states, mind–body harmony. Interpersonal harmony is related to solidarity and interdependence, and manifested in various contexts, e.g., marital, family, social, racial, intergroup harmony. However, the diversity of harmony models and the lack of standardized measures have made it difficult, if not impossible, to compare findings across studies. Future research may aim at a universal model integrating essential components from different sources to develop systematic, comprehensive theories, especially on the structure and dimensions of harmony. More work should also be done to validate the existing constructs and instruments on harmony, so as to estimate its effect size on mental health outcomes.

At the practice level, harmony has become the treatment goal of some psychotherapeutic approaches. For instance, Ebigbo, Oluka, Ezenwa, Obidigbo, and Okwaraji described harmony restoration therapy, in which illness is perceived as distortion or disturbance of harmony. Thus, treatment is geared toward restoring the harmony between the self and the environment. Couple and family therapy involves training social skills with promoting harmonious relationships as an objective. Future work may apply the harmony conception not only in organizational and therapeutic contexts, but also to intercultural interactions, targeted at communication competence.

Positive psychology articulates a focus on human strengths and virtues. Harmony is one of such positive elements with strength building. In pursuit of holistic harmony, health, happiness, and harmonious relationships are encompassed to reach optimal balance and equilibrium.

SEE ALSO: ► Chinese positive psychology ► Culture ► Values  
► Virtues

## Health Psychology

Heather Rasmussen  
*University of Kansas*

*Health psychology* is a discipline of psychology that “strives to understand how biological, behavioral, and social factors influence health and illness” (Lopez & Jones, n.d.). Health psychologists engage in a broad range of work roles including teaching, research, and clinical positions. In the following, an extended definition and a brief overview of the early history of health psychology will be provided. Then, the content areas of the field will be presented.

## History of the Field

The link between the mind and body has been contemplated throughout history, first evident from the writings of philosophers such as Plato and Hippocrates. Fast forward to the year 1977 in the journal *Science*, where Engel provided a critique of the traditional medical model and argued for a new model that considered the interaction of social, environmental, and psychological influences on health and disease. Psychologists, with their expertise in the behavior of individuals, became interested in this burgeoning interdisciplinary field. Not long after, the Health Psychology Division or Division 38 of the American Psychological Association (APA) was established in 1978. This division was formed in response to the realization that, indeed, people's behavior may play a role in health and disease and psychologists, with their expertise in human behavior, could contribute to this area of science. In 1982, Joseph Matarazzo provided the following definition of health psychology which was endorsed by members of Division 38:

Health Psychology is the aggregate of the specific educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, the identification of etiologic and diagnostic correlates of health, illness and related dysfunction, and the analysis and improvement of the health care system and health policy formation. (1982, p. 4)

Since the early days of Division 38 of the APA, interest in health psychology has continued to grow. The flagship scientific journal of the division is *Health Psychology*. Division 38 also has a website for those interested in more information about health psychology: [www.health-psych.org](http://www.health-psych.org).

There exist other fields of study that are similar to health psychology that do not include psychology in the title. These related fields include psychosomatic medicine and behavioral medicine and each has similar goals as health psychology. These fields are interdisciplinary fields that welcome psychologists and have their own associations and scientific journals coupled with them (e.g., *Psychosomatic Medicine* and the *Annals of Behavioral Medicine* to name a few). Health psychology, behavioral medicine, and psychosomatic medicine are all fields that are recognized *internationally* as well, and there are international scientific meetings, membership societies, and journals that focus on each of these disciplines.

## Content of the Field

Health psychology is a broad field much like psychology itself and it is both an applied and a research field. An outline of some of the overall goals of health psychology will be presented. Then, a brief description of some of the topics will be provided so that the reader may further investigate those areas of interest. Finally,

it is important to note that health psychologists have investigated the links between positive constructs and most of the following topic areas listed.

Referring to the Division 38 definition of health psychology, the four major objectives are: 1) promotion and maintenance of health; 2) the prevention and treatment of illness; 3) the identification of etiologic and diagnostic correlates of health, illness and related dysfunction; and 4) the analysis and improvement of the health care system and health policy formation. While the objectives are certainly interrelated, some examples might help elucidate them. An applied health psychologist might work toward the promotion and maintenance of health through using interventions strategies such as campaigns encouraging people to engage in daily exercise (objective one). Of course, a research health psychologist could investigate the effectiveness of these types of interventions (objective one). Other health psychologists could implement interventions to help patients adhere to medical regimens (objective two). Identifying behavioral risk factors for disease can help health psychologists create prevention programs, such as smoking cessation programs (objective three). Finally, a health psychologist may research the connection between school lunch programs and childhood obesity in efforts to inform policy makers about the need to improve nutrition in schools (objective four).

Following is a brief overview of three of the content areas in which health psychologists may conduct research: epidemiology; biological mechanisms; and individual differences. These particular areas were chosen to give the reader an idea of the broad range of research topics, perspectives, and disciplines that health psychology touches upon. It is by no means an exhaustive list as space limits do not permit a full overview of topics. Other major topic areas are listed, however, for those interested.

## Epidemiology of Health and Illness

*Epidemiology* refers to the study of the distribution and frequency of injuries and illness in different populations. Such studies provide scientific information and terms that health psychologists use in their research. Health psychologists may also conduct research directly with epidemiologists. The scientific studies that epidemiologists typically engage in help to define diseases and identify risk factors. Similarly, health psychologists also engage in research to identify factors that contribute to health and disease. An example may help illuminate how psychological factors may contribute to illness. In a 2002 meta-analysis, Rugulies found that people diagnosed with clinical depression, without signs of heart disease at baseline, are at increased risk for heart attack and coronary death at follow-up.

Many of the terms that health psychologists have adopted also stem from epidemiology, including *mortality* (death), *morbidity* (having a disease or injury), *prevalence* (number of cases, such as number of people who have been infected with e-coli), and *incidence* (number of new cases during a specified time period).

## Biological Mechanisms

Health psychologists also are interested in how behavioral, social, and environmental variables interact with biological mechanisms. For example, smoking is a behavior that affects health and is a cause of cancer. The act of smoking alters bodily systems (e.g., the lungs) which can result in disease. Stress also has been shown to have effects on disease by altering the activity of the cardiovascular and immune systems. Researchers can study these biobehavioral mechanisms by investigating: 1) behavioral or social variables that have *direct* effects on biological functioning (e.g., stress may have a direct effect on the cardiovascular system); 2) variables that influence other behavioral or social variables that in turn affect health, termed *indirect* effects (e.g., stress may influence tobacco use which affects health); and 3) variables that can affect treatment (e.g., depression may affect whether a patient adheres to a medical regimen). Examples of research investigating biological mechanisms are the studies conducted by Sheldon Cohen and colleagues that have found considerable support for the notion that stress increases the risk of infections, such as the common cold.

## Individual Differences

The role of individual differences, or personality, in health and disease has generated a large and heterogeneous volume of research. There are many ways that individual differences may be related to health and illness. Some researchers are interested in the role of individual differences in the development of disease. An example would be research by Friedman and Rosenbaum in 1959, which demonstrated that individuals with Type A behavior (hostility, time urgency, competitiveness, etc.) had a higher risk of coronary heart disease. Subsequent research by Matthews and Haynes in 1986 found that hostility is the toxic element that is linked to higher risk of heart disease. Other researchers are interested in causal mechanisms, such as how personality influences biological activity (as mentioned in the preceding section) and how personality influences health behaviors (e.g., exercise behaviors). Emotion-related personality factors, such as negative affectivity (the tendency to experience negative emotions, such as neuroticism or depression) and emotional expression (such as anger expression) have also generated a substantial amount of research interest. Indeed, researchers have found that negative affectivity plays a role in disease; Frasure-Smith, Lesperance, and Talajic have found that depression is related to progression of coronary heart disease. Researchers also have found links between emotional expression and health. Pennebaker and colleagues have found that written expression of emotions is related to decreased health problems. A final approach to studying the role of personality in health and disease is social-cognitive attributes. These include constructs such as self-efficacy, optimism, and hope. Similar to the other areas of research in personality and health, the aforementioned traits also have been linked to health. In a study by Scheier and colleagues, optimism was related to better physical recovery and lower rates of rehospitalization in patients undergoing coronary artery bypass surgery.

Finally, an overview of health psychology handbooks and textbooks reveals the following other major topic areas that may be of interest to readers:

- health related behaviors;
- health related cognitions;
- coping with chronic disease;
- gender & cross-cultural perspectives;
- intervention studies;
- prevention efforts;
- adherence; and
- pain.

SEE ALSO: ► Cortisol ► Immune system ► Oxytocin ► Physical health  
► Taylor, Shelley

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## Heart-Brain Connection

Rollin McCraty and Robert A. Rees  
*Institute of HeartMath*

The connection between the human heart and brain, once considered minor and inconsequential, has now been demonstrated through a variety of scientific studies to be significant, complex, and highly sophisticated. This is in keeping with the understanding that complex living systems, such as human beings, are composed of numerous interconnected, dynamic networks of biological structures and processes. The recent application of systems thinking in the life sciences has given rise to the understanding that the function of the human organism as an integrated whole is determined by the multilevel interactions of all the elements of the psychophysiological system.

Recent research has seen the emergence of a new understanding of how the brain functions and how the heart and brain interact in a dynamic relationship that regulates many aspects of cognition and gives rise to emotional experience. The connections between the heart and brain are complex and involve an ongoing dialogue in which the two major systems continuously interact and influence one another's function.

The heart plays a central role in the generation and transmission of system-wide information essential to the body's function as a coherent whole. For example, the heart is the most consistent and dynamic generator of rhythmic information patterns in the body. As the most powerful generator of electromagnetic energy in the human body, the heart produces the largest rhythmic electromagnetic field of any of the body's organs. The heart's electrical field is about 60 times greater in amplitude than that generated by the brain, and the magnetic field produced by the heart is more than 5,000 times greater in strength than that produced by the brain.

The heart's intrinsic nervous system is a sophisticated information-encoding and processing center that operates independently of the brain. Since it functions in multiple body systems, the heart is uniquely positioned to integrate and communicate information across systems and throughout the body; and, of all the bodily organs, the heart possesses by far the most extensive communication network with the brain. In addition, afferent (ascending) input from the heart not only affects the homeostatic regulatory centers in the brain, but also influences the activity of higher brain centers involved in perceptual, cognitive, and emotional processing, thereby affecting many and diverse aspects of our experience and behavior.

The heart communicates with the brain in four major ways: neurologically (through the transmission of nerve impulses), biochemically (via hormones and neurotransmitters), biophysically (through pressure waves), and energetically (through electromagnetic field interactions), all of which significantly affect the brain's activity.

Research has shown that sustained positive emotions facilitate an emergent global shift in psychophysiological functioning, which is marked by a distinct change in the rhythm of heart activity. This global shift generates a state of optimal function, characterized by increased synchronization, harmony, and efficiency in the interactions within and among the physiological, cognitive, and emotional systems. This state is called psychophysiological coherence. The coherent state reflects increased order in higher-level control systems in the brain, increased synchronization between the two branches of the autonomic nervous system (ANS), and a general shift in autonomic balance towards increased parasympathetic activity. Furthermore, increased heart-brain synchronization is observed during the coherent state; specifically, the brain's alpha rhythms exhibit increased synchronization with the heartbeat in this mode.

An important tool that provides a window into the activity occurring between the heart and brain is heart rate variability (HRV), an analytic tool that measures the beat-to-beat changes in heart rate. HRV is generated largely by interaction between the heart and brain via the neural signals flowing through the afferent (ascending) and efferent (descending) pathways of the sympathetic and parasympathetic branches of the ANS. HRV is thus considered a measure of neurocardiac function that reflects heart-brain interactions and ANS dynamics.

It is not commonly understood that the ascending cardiovascular signals involved in physiological regulation also cascade up into the higher centers of the brain,

profoundly influencing their activity and function. Of particular significance is the influence of the heart's input on the activity of the cortex – that part of the brain that governs thinking and reasoning capacities. Depending on the nature of the heart's input, these signals can either inhibit or facilitate working memory and attention, cortical processes, cognitive functions, and performance.

Studies conducted at the Institute of HeartMath demonstrate that intentionally shifting one's emotional state to a heart-felt positive feeling state modifies the ascending neurological input from the heart to the brain. This suggests that as people experience sincere positive feelings, in which the heart's rhythms become more coherent, the more ordered information flow from the heart to the brain acts to facilitate cortical function and improve cognitive performance. These findings may also help explain the significant shifts in perception, increased mental clarity and heightened intuitive awareness many individuals report when practicing positive emotion-refocusing and restructuring techniques.

Studies show that the cardiac field is modulated by different emotional states, suggesting the possibility that the electromagnetic field generated by the heart transmits information that can be received by others. One research study revealed that one person's heart signal can be detected in another person's brainwaves, and that heart-brain synchronization can occur between people when they interact. Thus, it appears that as individuals increase psychophysiological coherence, they become more sensitive to the subtle electromagnetic signals communicated by those around them. Taken together, these results suggest that heart-brain communication may be a little-known source of information exchange between people, and that this exchange carries information about our emotions.

As a growing and promising field of scientific inquiry, heart-brain research is attracting increasing attention from cardiologists, psychophysiologicals, neurobiologists, psychologists, and others. This research is taking place at the Institute of HeartMath (a pioneer in the field), neurocardiology departments at various universities (e.g., University of Montreal and University of Oklahoma), as well as at a number of university and independent research centers, including the newly-established (2006) Earl and Doris Bakken Heart-Brain Institute at the Cleveland Clinic. Such research promises to reveal even deeper connections between these two vital organs.

SEE ALSO: ► Biofeedback ► Complementary and alternative medicine

## Hedonics

Joar Vittersø

*University of Tromsø, Norway*

Hedonics refers to a branch of psychology that deals with pleasurable and unpleasurable states of consciousness. From ancient Greek *hêdonê*, meaning

“pleasure,” hedonics constitutes one of the three pillars of positive psychology (the other two are positive traits and positive institutions). The related term *hedonism* is the doctrine that pleasure is the sole good. Philosophical hedonism claims that pleasure is the moral good, suggesting that the definitive social norm is to provide the greatest amount of pleasure for the greatest number of people. Psychological hedonism holds that everyone aims only at pleasure as the ultimate end, and that at any given moment there is an ordering of events along a continuum of *hedonic tone* ranging from very aversive through neutral, to very desirable. Hedonic tone is often used synonymously with broader constructs, such as like versus dislike, aversive versus desirable, joy versus sorrow, or good versus bad.

Different views on hedonics exist. Some scholars claim that hedonic tone is a central feature of any conscious experience, others say that only emotional feelings have hedonic elements. Another area of disagreement unfolds around the idea that emotions can be reduced to one (or a few) basic elements, among which hedonic tone is the most important. Proponents of this view, which defend a formative model of hedonics, say that hedonic is the smallest component of all emotional feelings and that hedonic tone is a psychological primitive (which means that it is irreducible to anything else psychological). Basic emotions theorists oppose to this view claim that each one of a limited set of separate emotions has a distinct set of characteristics (affect programs), including a feeling tone that is irreducible to other elements such as hedonic tone. Third, a perspective on hedonics simply suggests that the construct is an umbrella term grouping all emotions into two broad categories of pleasant and unpleasant emotions. This approach promotes a reflexive model of hedonics, in contrast to the formative view mentioned above.

## Philosophical Background

As so often, the ancient Greeks took the first move toward a systematic investigation of hedonics. A principal idea was developed by Plato, and is referred to as *quantitative hedonism*. It goes like this. All actions can be measured on the basis of how much pleasure and how little pain they produce. Although qualitative differences between distinct forms of pleasure do exist, a quantitative approach may be justified if one weighs one kind of pleasure against another. Then one always will have to judge as preferable the one who offers the greater and the more. Aristotle on the other hand, proposed that pleasure cannot be quantified. He linked pleasures with a hierarchy of activities, some providing false pleasures, some providing true pleasures. The view that the good life is the same as activity in accordance with virtue is sometimes referred to as the *eudaimonic* approach to happiness, which is an alternative to hedonism.

The controversy between quantitative and qualitative approaches to hedonics was elaborated by the nineteenth-century British philosophers Jeremy Bentham and John Stuart Mill. Bentham believed that pleasure is a single, homogeneous



sensation. For him, the sensation varied in intensity, duration, certainty, remoteness and causal properties (the tendency to produce more pleasure), but not in quality. The value of pleasure can be quantified, essentially by multiplying pleasure intensity by pleasure duration.

Mill defended Bentham's general idea of hedonics, but criticized some parts of it. Although Mill never developed a clear theory of pleasure, he basically took a qualitative approach. As the Greeks before him, Mill believed that there can be different levels of pleasure. His memorable line, "It is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied," illustrates how he declared some pleasures to be better than others. In positive psychology, traces of Mill's perspective can be found in Martin Seligman's theory of authentic happiness, whereas Bentham's quantitative perspective has inspired Daniel Kahneman's development of a theory of objective happiness.

## Early Psychological Views

Although John B. Watson combated the idea that pleasure had anything to do with scientific psychology, hedonics was important to several of his predecessors like Thorndike, Wundt, James and Freud. Thorndike needed a hedonic component to make the law of effect work. For Wundt, hedonic quality was one of three dimensions of a conscious experience (the other elements were excitement vs. calmness and tenseness vs. relaxation). These elements combine into complex feelings. Together with body sensations and associated ideas the complex feelings constitute emotions. At about the same time, James wrote that feelings of pleasure and displeasure caused by bodily changes were the essence of an affective state. In his pleasure principle, Freud subscribed to the ideas of psychological hedonism. However, in his theory pleasures are negotiated with the "reality principle," and pleasures are often postponed, or searched for in a transformed and accepted form. In the first half of the twentieth century, researchers such as Paul Thomas Young (working with rats) and Beebe-Center (working with humans) persistently argued the vital role of hedonics and both tried to create a science based on pleasure. Somewhat later, Daniel Berlyne contributed the idea that pleasure is determined by the arousal potential of a stimulus.

In neuropsychology Olds and Milner discovered that rats, if wired to a self-administered device that gave electrical stimulation to particular areas of their brains, stimulated themselves almost continuously. Rather than eating, drinking or having sex, the rats preferred intracranial self-stimulation by pressing the lever that gave the electrical signals thousands of times in a row, and in 1956 Olds came straight out and called the region from which self-stimulation could be obtained "pleasure centers." Similar effects have later been observed in humans, who also self-stimulated more than thousand times in a row, and begged to do it "just a few more times" when the unit was taken away.

## Current Issues

Important aspects of today's research in hedonics include phenomenology, dimensionality, functionality and neural taxonomy. The phenomenal part of hedonics deals with the question of what pleasure and displeasure feels like. Very roughly, pleasure simply feels good. A more elaborate description comes from a subject telling what his sense of a nice odor is: "When I say 'pleasant' it does not stand for anything else than I would smell it more if I could." Far from being fully understood, the phenomenology of pleasure and other feeling states has reemerged as a research topic in the science of consciousness.

The issue of feeling quality relates to the question of dimensionality: Is pleasure one thing (the unity view) or is pleasure just a label for a broad collection of qualitatively different things (the multiplicity view)? In one line of research the two positions disagree as to whether pleasure and displeasure are truly bipolar opposites of the hedonic continuum. Rather than running from displeasure through neutral to pleasant, the multiplicity view suggests that pleasure and displeasure are separable and perhaps independent dimensions. Hundreds of correlational studies are unable to settle the disagreement. The reported results vary widely, partly due to differences in use of scales, response format and statistical analyses. Experimental studies reveal that pleasant and unpleasant feeling do co-occur, particularly at low intensities, but this might still be due to rapid changes in attention between the pleasant and unpleasant feelings. In part, the disagreement between the two positions is a matter of defining hedonic constructs, and both conceptual development and experimental data are probably needed in order to reach a higher level of consensus.

The issue of dimensionality also relates to higher and lower pleasures. Sometimes the distinction between the two is rephrased into a difference between pleasures of the body versus pleasures of the mind, the latter is also referred to as the emotion of interest. The reflexive hedonics position is that at higher level of abstraction, an affective feeling is either good or bad, and if it is good, regardless of whether it is felt like interest or engagement, it may be characterized as pleasant since pleasure at this level is used synonymously with everything that is felt as good or expressed as approach behavior. According to the formative hedonistic model, pleasure is a common denominator for all positive emotions. Hence, interest is composed of a combination of pleasure and some degree of arousal, even if the feeling itself differs from that of pleasure. Seligman seems to favor a third possibility to the dilemma, since he eliminates hedonic quality from higher pleasures such as interest or engagement.

The principal functions of pleasure and displeasure are to secure survival and increase well-being. Just as the ability to discriminate (cognitively) among aspects and objects in our surroundings is necessary for survival, so is the ability to ascribe hedonic quality to the physical and social world. Our existence would be in jeopardy if, for example, the taste evoked by toxins was good and sugar tasted unpleasant.

Furthermore, to sustain equilibrium, brain mechanisms have evolved to generate distress when we deviate from a “set-point” level, and pleasure when we undertake acts to alleviate disequilibrium. The reason why hedonic quality has evolved is thus to signalize benefits and treats and to reflect when action should be held back and when it should be carried on. Others have proposed that a functional aspect of pleasure is to provide a common currency in the interest of helping organisms to rank their priorities. Another task that pleasure does is to reward. As reinforcement pleasure increases the likelihood of repeating the preceding behavior, and at the mental level it helps savoring good moments and recent successes in our memory.

The classical view holds that the primary functions of pleasure and pain are to promote approach and avoidance. In contrast, some theories consider the approach-avoidance dichotomy too simplistic for human beings, and argue that the idea of basic emotions is needed to fully account for the relation between emotional feelings and different kinds of action readiness. Some scholars even argue that far from promoting approach, pleasure actually stimulates behavior that prime movements away from a current goal. The wisdom in this approach is that although we sometimes feel pleasure when undertaking acts that alleviate disequilibrium, pleasure is more typically felt when a goal actually has been achieved or a need has been fulfilled. Pleasure follows when homeostatic equilibrium has been reestablished and signalizes that we are ready to take up a new set of goals and actions. Rather than promoting approach, the function of pleasure is thus to respite from approach behavior. Pleasure leads to coasting, which means putting less effort toward the goal one is pursuing.

The possibly most influential model of hedonics in neuroscience suggests that the brain dopamine systems mediate pleasure. Boosted by Olds and Milner’s study, an impressive number of studies have referred to dopamine as the brain’s *pleasure neurotransmitter*. More recently however, an alternative view is gaining momentum. It suggests that opioids may be the key transmitter for pleasures, whereas dopamine primarily controls another motivating force, referred to as *wanting*. It seems likely that future hedonic research will witness an increased interest in the neuroscience of liking and wanting.

## The Future

In the most comprehensive book on hedonic psychology, and speculating about the future, Kahneman, Diener and Schwarz wrote:

The hedonic psychology of the future, as we imagine it, will analyze the full range of evaluative experience, from sensory pleasure to creative ecstasy, from fleeting anxiety to long-term depression, from misery to joy. It will also address the determinants of these experiences, from the genetic to the societal and from the biochemical to the cultural. (1999, p. ix)

SEE ALSO: ► Happiness ► Pleasure ► Positive emotions ► Well-being

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## Heroes

Joseph O'Brien and Steven White  
*University of Kansas*

### Definition and Overview

The meaning of *hero* is shaped by one's culture, personal experience, the time in which one lives, and the reasons why a figure is chosen as a hero. The ancient Greeks considered a hero as a person with divine association that made a decision to pursue a quest, exhibited courage and strength often in the face of adversity, and represented what the culture considered good and noble. Joseph Campbell advanced a modern idea of a hero, most notably in *The Hero with a Thousand Faces*, that not only was rooted in his study of myths worldwide, but that also drew upon analytical or Jungian psychology. Campbell portrayed a hero as an individual on a journey who increasingly gained self-awareness while examining the personal feelings and behaviors exhibited on the quest. A hero leaves the ordinary life on an extraordinary quest against almost insurmountable odds, yet achieves a decisive victory and returns with the power to better the ordinary life. Erikson suggested that cultural heroes or reference idols exert profound influence on individuals and cultures. For children, heroes, with their accompanying myths and legends, are part of the material from which their dreams and dramas are derived. Playing out hero themes is one way children come to understand their society, their role in it, and their potential for positive impact on it. As representations of a larger culture, cultural heroes offer insight into societal belief systems. What makes heroes powerful cultural forces is how they embody important cultural values and ordinary human qualities, which helps explain a growing distinction between cultural and personal heroes.

Whereas cultural heroes typically are public figures, personal heroes may be public or proximal figures. The latter suggests that an individual might have a direct relation with a personal hero. Whereas a traditional hero pursued a higher calling or a transcendental good, such as Joan of Arc's devotion to God or an Enlightenment figure's commitment to truth, in more recent times a hero might seek either a higher calling or good in ordinary life, thus the emergence of personal heroes. Some suggest that the "loss" of the traditional or cultural hero illustrates contemporary society's moral bankruptcy, while others suggest that a decreasing

importance placed upon such heroes reflects our culture's changing conception of a hero.

## **Social-Cognitive Development and Personal Identity**

In his social development theory Vygotsky hypothesized that one's higher mental processes originate from social processes and social relations. Building on Vygotsky's work, Bandura through his social cognitive theory suggested that one learns by observing and modeling the behaviors, attitudes and emotional reactions of other people. Accordingly, our personal identity results from the interaction of personal factors, behavior, and the environment. There is a cognitive side to personal identity or character development, one that includes perspective-taking, moral reasoning and thoughtful decision-making. Since heroes represent the epitome of the attitudes and behaviors most desired by the culture, an emphasis on not simply modeling such attitudes, but illustrating how to reason through and make thoughtful decisions related to such attitudes and behaviors can enhance people's sense of identity and efficacy. While limited, research suggests that identifying with heroes shapes one's attitudes and behaviors, such as one study where researchers concluded that a series of entertainment education programs changed people's sexual behaviors through the use of everyday heroes that modeled the desired behaviors.

## **Factors Shaping the Meaning of Hero**

### **Culture and Time**

If knowledge is socially constructed as Vygotsky and Bandura theorized, then each culture defines who and what qualify as cultural heroes. In turn, as time passes the culture's conception of hero is redefined and its pantheon of heroes changes. Charting U.S. society's changing perceptions of Christopher Columbus, who periodically has been portrayed as a hero, villain, genius and visionary, illustrates how the idea of what characterizes a hero is sensitive both to time and to changes in cultural values. This point is supported by research, such as a study by Pena, French and Doerann of a 1950s and a 1980s television hero where researchers concluded that the 1980s hero was more fearful and self-critical than his 1950s counterpart.

While in the US hero has become a gender neutral term, some of the defining characteristics such as strength and courage, for example, are still present in television superheroes. The growing number of female superheroes as the focal point of television series illustrates though the growing cultural acceptance of females in hero roles, supporting the time-sensitive nature of what characterizes a hero. While males typically identify male figures as heroes, the research is divided on whether females are more likely to choose male or female figures.

### Personal Experience

If a culture continually redefines its values and therefore its cultural heroes, it is reasonable to assume that individuals do the same. According to Piaget, social-arbitrary knowledge, such as language, values, rules, morality and symbol systems, arises from interactions that occur in one's experiential world and from one's reflection on those interactions. Given that each person's experiential world is unique, one's past personal experiences influence how one defines a hero and therefore who they select. Since individuals may perceive their environment differently than the larger culture, this might explain the distinction between one's personal heroes and the larger cultural heroes. As representative of the larger culture, cultural heroes are public figures. While one's personal heroes might consist of cultural heroes, i.e., individuals that have transcended ordinary life, they are as likely to represent proximal, private figures leading ordinary lives. What is unclear is whether there is a relation between one's heroes and one's age and/or developmental level.

### Purpose and Context

A conception of hero, and which figure is chosen as a hero, partially depends upon the purpose that the hero serves and the context in which the person identifies with a hero. Research in physical education, grounded in goal achievement theory, demonstrated that when young people used sports heroes as exemplars of individuals attaining personal goals, they were more successful in accomplishing their own goals. The desire for the physical education teachers to encourage and enable their students to attain their goals narrowed the possible heroes to sports figures that were successful athletes. Similarly, in another study a group of educational and political public figures chose other public figures as their heroes. Knowing who a person has identified as a hero is but a first step in understanding the purpose for the identification. In one study by Zehnder and Calvert adolescents were shown portions of a *Batman* film. Participants chose to identify with Batman not because of his aggressive, at times violent nature, but due to his compassion and conscience.

### Hero Identification

On many popular surveys respondents identify entertainment and/or sports figures as their heroes, which cause those giving the survey to question if celebrity worship has replaced hero identification. Studies though where participants are asked to explain their choices suggest that one's celebrity status is not necessarily the reason for the choice. While several studies have investigated patterns to hero identification, such patterns have proven difficult to determine since while such surveys and studies typically operate from a certain construct of hero, they fail to ascertain

the respondents' conception of hero. The definition of hero also varies across the surveys and studies such as a New Zealand study where celebrity and hero were almost synonymous.

Heroes for adults and youth are drawn from all segments of society. Youth in Ireland, Slovenia and the US, for example, have identified figures ranging from family, community, entertainment/sports, politics, religion, and the arts and sciences as their heroes. The characteristics that they associated with a hero were equally diverse, varying from physical traits such as beauty, personal traits such as caring and honesty, and individual accomplishments. The question of whether a specific accomplishment, such as a heroic act, qualifies a person as a hero illustrates the tension between the traditional conception of a cultural hero and heroes in ordinary life. Since courage and strength are often considered defining attributes of a hero, a person that performs a heroic act is often elevated to hero status. Other attributes of a traditional cultural hero, such as attainment of self-knowledge and the making of a conscious decision, are overlooked.

SEE ALSO: ► Courage ► Paragons

## Holistic Healing

Søren Ventegodt<sup>a</sup> and Joav Merrick<sup>b</sup>


<sup>a</sup>*Nordic School of Holistic Medicine, Research Clinic for Holistic Medicine, Quality of Life Research Center, and Nordic Campus, Inter-University College for Health and Development;* <sup>b</sup>*National Institute of Child Health and Human Development, Israel*

*Holistic healing* means healing of the whole human being, meaning body and sexuality, mind and feelings, spirit and heart. Other words for holistic healing are *existential healing* or *salutogenesis* – rehabilitation of the *sense of coherence*. In lay terms “healing of the patient life” is an often-used expression. The art of healing a whole life is called *existential therapy*, *holistic medicine*, or *consciousness-based medicine*.

Holistic healing was the intent of most premodern medical systems. The original way to induce holistic healing was the rehabilitation of the patient's character and knowing of self – his or her mission in life, gifts, and true talents. Different medical systems have used different cosmologies to give the different conceptual prisms through which the patient's character and personality were seen and understood, diagnosed and healed (see Table 3).

Most holistic healing of today is done in alternative or complementary medicine still using these rather unclear and symbolic archaic concepts instead of scientific theory or documentation. A recent trend in medical science is *scientific holistic medicine* based on scientific theory of quality of life, sexuality and consciousness with scientific evidence of effect. Biomedicine is normally not holistic in its use of drugs that address the body's chemistry only and not the character, consciousness, and

**Table 3** The fundamental concepts of some pre-modern holistic medical systems (the basis of four types of “character medicine”, see text).

<i>System</i>	<i>Element</i>	<i>Concept</i>
Chinese – 5 elements	Metal	Sadness Spicy Fall Regression White
	Earth	Worry Sweet Change Yellow Dampness Late summer Transition
	Fire	Joy Growth Heat Summer Red Bitter
	Wood	Rage Sour Spring Wind Birth Green
	Water	Salty Winter Cold Death Black Fear Bones Ears
Hippocratic – 4 elements	Fire	Transformation Warm Destructive Masculine Creative
	Air	Easy Inspiration Light Spirit Communication
	Water	Floating Dynamic Emotion Persevering Feminine
	Earth	Firm Heavy Steady Dark Hard Feed Protect
Ayurveda – 3 elements	Vata	Dry Light Cold Rough Subtle Propelling
	Kapha	Wet Cold Heavy Dull Slimy Soft Static
	Pitta	Oily Spicy Hot Light Pungent Mobile Liquid
 – 2 elements	Yin	Cold Wet Vacuity Internal Dark Below Down Feminine
	Yang	Hot Dry Repletion External Light Above Up Masculine

wholeness of the patient. It seems to be a worldwide trend that more and more patients acknowledge their need for holistic healing and as a result the biomedicine is losing terrain to the alternative, complementary and holistic medicine, when it comes to the number of consultations. In the United States there are now more holistic medical sessions than biomedical sessions and Europe is following.

Approaches to holistic medicine hold fast to the assumptions that the causes of the nongenetic, nontraumatic diseases – which mean practically all known diseases – are to be found in the depth of the patient’s consciousness. As long as the deepest layer of existence has not been addressed the healing is only symptomatic, not holistic.

The central idea in scientific holistic medicine is that patient’s *state of existence* can be more whole or more damaged, and this state determines the three fundamental existential dimensions of life: the quality of life; the physical and mental health; and the general ability of functioning – in working life, social life, family life and sexual life. The sign of holistic healing is thus the triple improvement of the patient’s life in these three dimensions: the patient is turning *happy*, *sound*, and *able*. The sign of holistic damaging, the pathogenesis, is the reverse: loss of quality of life, health and ability.

In *clinical holistic medicine* the holistic healing is based on scientific theories (e.g., the theory of Antonovsky–salutogenesis, the Life Mission Theory, the Theory of Human Character) and the holistic healing is induced by a combination of psychodynamic short time therapy, bodywork, and philosophy of life.



## The Five Central Principles of Holistic Healing

1. The healing should be according to *the principle of salutogenesis*, addressing the existential core of the patient, and not a part of him or her, whether this is the body, the mind, the spirit/soul, or the gender and sexuality. Not even the health in symbolic significance is enough. When the patient heals holistically both past and future are healing, the whole personality heals and the person finds his true place in the universe, to be the constructive and valuable, responsible and participating individual he was meant to be.
2. The healing should take the patient back to the time when and where the damage was done, using the *principle of similarity* going all the way back to Hippocrates. So many things can harm the patient's wholeness, and only by integrating this, meeting it again in life or in therapy can the patient truly heal.
3. *Hering's Law of Cure* states that in healing the patient will show all the symptoms that he showed on his route to the disease. When he heals the problems will surface coming from their hidden places in the core of the body, the vital organs and the head (upper body). A disease will therefore leave the organism in a specific pattern that can be seen and understood and accelerated by the physician or therapist.
4. *The principle of minimal use of force* is also known from Hippocrates – in Latin “*primum non nocere*” – do no harm. Many patients prefer holistic healing methods to biomedical as the use of force is much less in psychotherapy, bodywork, and philosophical exercises, than in using drugs and surgery.
5. The most important principle in holistic medicine actually initiating the holistic healing is *the principle of added resources*. It is the adding of resources in present time in the therapy that allows the patient to go back in time into the traumatic event that originally damaged his existence, and only in doing that can the patient integrate the event and heal his existence. The reason for the necessity of going back and integrating the event is that what allows the trauma to be a trauma are the decisions the patient took in the moment of the trauma. It is this modification of the patient's consciousness and personal philosophy of life that is the real damage on the patient's existence, and when the patient “lets go” of the old, negative, and life-denying decisions, then the existential healing occurs.

## Conclusion

You can say that the real damage to human existence is happening in the patient's consciousness, and the imbalances and negativity in the consciousness are what create the cascade of other problems in body, mind, sexuality, or spirit. What seems to be most interesting about holistic medicine and holistic healing is that

the life-time expense for medical attention with holistic medicine seems to be 1:100 or less of the price of biomedicine interventions, and often the effect with holistic healing is global – affecting all areas of the patients life – and lasting as the etiology and primary cause of the disease has been dissolved.

SEE ALSO: ► Complementary and Alternative Medicine ► Consciousness  
► Quality of life

## Honesty

Theresa A. Thorkildsen<sup>a</sup> and Kurt M. Hanus<sup>b</sup>

<sup>a</sup>University of Illinois at Chicago; <sup>b</sup>Michigan City High School

*Honesty* is a human characteristic that reflects a quest for truthfulness rather than deceit in thought and action. The psychological study of honesty has a long and rich history that can be best captured as forming two traditions. In one tradition, honesty is defined as a duty to nondeceptiveness that can be equated with emotional, cognitive, and behavioral authenticity. These studies of *honesty-as-authenticity* involve the exploration of individuals' intrapsychic responsibilities to be true to themselves when confronting societal norms. The other tradition focuses on the conditions under which individuals in society make and accept responsibility for consistently being truthful in their interactions with others. These studies of *honesty-as-truthfulness* are concerned with candor in interpersonal interactions.

Within each tradition, honesty has been represented in one of three ways. Honesty can be a character trait that influences whether individuals respond authentically or behave sincerely in particular situations. Honesty can also be a state that is elicited by the demands of various situations; individuals will respond authentically or sincerely when they have learned to define truthfulness as beneficial. Honesty is also seen as instinctive intrapsychic reactions or truthful forms of prosocial behavior that cannot be taught. Comparing findings from the two research traditions and three theoretical frames within each tradition reveals a host of interesting conclusions about honesty.

## Honesty as Authenticity

Many of the researchers who explore intrapsychic authenticity endeavor to help individuals improve their daily functioning. Representative studies in this tradition are easy to find even though there are relatively few literature reviews.

Working with a dispositional theoretical frame, researchers have focused on the structure of personality and whether honesty is a dimension distinct from traits like agreeableness, conscientiousness, openness to experience, extroversion, and emotionality. Ashton and Lee (2005), for example, asked participants to answer different

questions about their personality, and compared and contrasted relations between these measured dimensions. Although it is currently difficult to confirm the existence of a unique honesty-humility dimension, findings suggest that such traits play an important role in individuals' self-awareness.

Researchers who assume that authenticity is elicited by the demands of particular situations have focused on the role of trustworthy thoughts and behaviors in the formulation and maintenance of relationships. Central in this work is the study of whether honest behavior helps to foster intrapersonal feelings of intimacy, empathy, and sympathy for others. Lopez and Rice (2006) and Smith (2003), for example, described how honesty emerges when individuals overcome feelings of guilt and shame arising from conflicts between personal desires and others' interests. Freud (1962/1923) noted that honesty occurs when individuals find comfortable ways to coordinate their superego and id. As with most research on honesty as authenticity, these studies are heavily dependent on self-reports of personal experiences and evaluations of relationship quality. Nevertheless, some investigators have begun to explore how behavior is affected by power while controlling for the subtle influences of situational authenticity.

Developmental psychologists who adopt an intrapsychic approach to the study of honesty look carefully at how conscience unfolds in time. Researchers like Aronfreed (1968) assume that individuals' honesty and corresponding conscience evolve as they interact with the world. Aronfreed's findings correspond with Hsieh's (2004) philosophical argument supporting the idea that lapses in honesty with ourselves and with others are necessary but not sufficient for moral growth. Today, most developmental psychologists seem to assume that interventions with children whose authentic choices undermine their daily functioning can have beneficial effects on behavior.

These intrapsychic approaches to understanding honesty focus on how well individuals are able to reduce inner conflicts. Participants are asked to compare what they *actually want* to do or be and what they assume they *should want*. Intrapsychic forms of honesty are evident when individuals can coordinate and understand their thoughts, emotions, and behavior while minimizing self-deception, guilt, and shame and maximizing trust, reliability, and intimacy in their relationships with others.

## Honesty as Truthfulness

Interpersonal approaches to the study of honesty reflect a strong commitment to understanding the mechanisms that drive behavior. In this work, a reality that is external to the person is defined and participants' reactions to the resulting situations are evaluated. The most well-known work completed in this tradition was by Hartshorne, May, and their various collaborators. In that work, honesty is contrasted with deceit across situations that entice participants to act and justify their actions.

Researchers who explore a dispositional notion of honesty-as-truthfulness focus heavily on the identification of character traits that allow for the consistent prediction of behavior. Although some of this work looks similar to that exploring honesty-as-authenticity, investigators studying honesty-as-truthfulness are expected to measure action as well as thoughts and feelings. Research of this nature is sometimes interdisciplinary; economists and biologists, for example, explore general patterns of human behavior and draw inferences about the adaptiveness of an honest disposition.

Like Hartshorne and May, theorists who assume that honesty is situationally determined tend to define events and interesting problems before exploring patterns of thoughts and behavior. They evaluate those features of a situation that foster different causal beliefs or honesty habits. Such investigators often measure deception as well as honesty to identify the sources of particular actions. Cross-situational consistency is rather low in this work leading researchers to assume that individuals may define the same situation in different ways.

Developmental research on honesty-as-truthfulness places a strong emphasis on how individuals at different ages justify their actions and the extent to which age plays a role in honest behavior. Researchers look at how individuals of different ages define particular situations and the predictability of behavior in light of those definitions. This work has led to the awareness that young children do not always discriminate teasing, lying, and fantasy. It has also led researchers to suggest that at some point in early and middle childhood, most children are likely to show some forms of dishonesty. If those situations are handled well, children come away from them with a richer understanding of honesty.

An interpersonal approach to the study of honesty focuses on whether individuals are able to behave with integrity even when they face pressures to behave in deceitful ways. Honesty-as-truthfulness is apparent when individuals consistently behave in prosocial ways, justify their behavior without the use of deception, and respond to social pressures with appropriate levels of candor and directness. Researchers working in this tradition are less preoccupied with understanding the intrapsychic reasons for honest behavior and instead look for stability in the expression of such values.

## **Understanding Honesty**

Honesty-as-authenticity and honesty-as-truthfulness offer very different representations of societal pressures and practices. Researchers who focus on authenticity seem to represent matters of conscience either as something to be developed or as an impediment to overcome. They consider how well individuals are able to coordinate their thoughts, emotions, and actions to reduce the inner conflicts of guilt and shame. Researchers who focus on truthfulness assume that a reality external to the person can be used as a means of evaluating honesty. In that work, researchers are concerned with the accuracy of social representations that go beyond

someone's imagination. Studies examine the predictability of honest actions in ways that either ignore questions of conscience or represent conscience as simply one mechanism for the regulation of appropriate behavior.

It would be a disservice to the complexity inherent in the many theories of honesty to simply combine the two traditions, yet these different approaches have yielded a multitude of resources for understanding the virtue of honesty. By allowing both research traditions to flourish, researchers continue to find new ways of construing honesty and identifying additional problems that are more easily understood.

SEE ALSO: ► Authenticity ► Humility ► Personality

## Hope

Lisa M. Edwards

*Marquette University*

Hope has been described by numerous philosophers, theologians, educators, and scientists over the years. While there are many different definitions of hope, it can generally be thought of as a positive mental state about the ability to achieve goals in the future.

Since the late 1900s social scientists have attempted to describe, measure, and study hope in various ways, and this construct has been conceptualized as expectations or feelings about goals and the future. Some conceptions of hope view the construct as an emotion that allows individuals to sustain belief during challenging times. While popular literature has generally portrayed this affective view of hope, most research has been conducted about models of hope that are more cognitive in nature. For example, Averill and colleagues described hope as an emotion that was guided by cognitions and influenced by environmental conditions. Stotland and Gottschalk each described hope as expectancies about reaching goals, with Stotland emphasizing the importance and probability of achieving goals, and Gottschalk describing a positive force that propels individuals to work through difficult circumstances. Similarly, Staats viewed hope as an expectancy which interacts with wishes to weigh the possibility and affect connected to the achievement of goals.

The theory of hope developed by C. R. Snyder and his colleagues over the past 20 years has received much attention both within and outside the field of psychology. In his seminal book, *The Psychology of Hope*, published in 1994, Snyder outlined his theory and early research efforts to understand hope more fully. Similar to previous theories, this conceptualization of hope is primarily cognitive in nature, though the theory evolved to include emotions as well. Snyder and colleagues described hope as a motivational state based on goals, pathways, and agency goal-directed thinking. Snyder proposes that *goals* are the targets of mental action sequences,

and that in order to necessitate hope goals need to be sufficiently important to individuals. Furthermore, goals must fall within the middle of a probability of attainment continuum, such that people can imagine they might be able to reach their goals.

In addition to goals, hope involves pathways thinking. Snyder described *pathways* as the mental capacity necessary to reach goals, which is also known as *waypower*. Pathways thinking allows individuals to find routes around obstacles to goals, which naturally occur as people often encounter challenges in their goal pursuit. For example, if one is learning to play the piano better, it might be difficult to find time to practice. Pathways thoughts might be those that would encourage one to prioritize activities, schedule specific practice times, and create a personal system of rewards in order to increase piano practice time.

*Agency* is the third component of hope. Agency refers to the motivation that propels individuals to initiate and sustain movement towards their goals. People with agency, also known as *willpower*, are able to remain determined and utilize their mental energy to move around obstacles and stay focused on achieving their goals. For the person trying to play the piano better, agency thoughts would be those reminders to stick with it, focus on improvements, and keep working towards the goal.

Snyder and colleagues note that pathways and agency thinking are positively related, additive, and reciprocal, but neither component alone defines hope. Agency and pathway are not synonymous, either, as some people show the ability to find pathways towards goals but not sustain the mental energy, or vice versa.

Snyder and colleagues also distinguish hope from other motivation-related constructs. For example, they note that self-efficacy relates to an individual's perceived capacity to carry out actions related to goals, which is similar to agency thoughts. Yet, hope theory also emphasizes pathways thoughts about goal attainment, which are not given equal emphasis in self-efficacy theory. While optimism, as conceptualized by Seligman, describes the positive attributions that individuals make about life events, hope is more focused on reaching specific goal-related outcomes through the use of agency and pathways thoughts. Research has indicated that hope provides unique variance beyond optimism and self-efficacy in the prediction of well-being, thus providing additional support for its distinctiveness from these constructs.

## Hope Measurement

Researchers have attempted to measure hope in different ways over the years. Stotland, for example, believed that it was more useful to ask individuals questions about their perceived capability of success, rather than utilizing self-report measures about their levels of hope. Erickson and colleagues devised a scale to operationalize Stotland's view of hope, and this scale included a list of goals to which individuals would rate the degree of their importance to them. Later, Staats and

colleagues developed a measure of hope which assessed both the cognitive and affective sides of hope, particularly focused on specific events and outcomes. This hope scale required respondents to rate the extent to which an individual wished for and expected a certain item, such as having more friends or being happy.

Snyder and colleagues developed several measures to assess hope in youth and adults in various contexts, including the Adult Dispositional Hope Scale, the Children's Hope Scale, and the Adult State Hope Scale. These efforts began with the development of the Adult Dispositional Hope Scale, also known as the Goals Scale. This 12-item self-report measure has been the most widely used in research over the past 15 years. The scale is designed to assess overall levels of trait hope, with high scores on the Goals Scale indicating high levels of hope. Four of the items tap into agency (e.g., *I energetically pursue my goals*), four tap into pathways (e.g., *I can think of many ways to get out of a jam*), and four are filler items that remain unscored. In original studies a 4-point Likert scale was used, but more recent studies have utilized an 8-point scale ranging from *definitely false* to *definitely true*.

In the development and validation of the Adult Hope Scale the authors found that the scale demonstrated good internal and test-retest reliability across six samples of undergraduate college students and two samples of adults receiving psychological treatment. Hope scores among these populations were positively related to other similar constructs such as optimism, positive affect, self-esteem, and expectancy for attaining goals. The two-factor structure of the Adult Hope Scale was confirmed in subsequent studies, and this measure has been used frequently in studies of hope in adults.

The Children's Hope Scale (CHS) is a 6-item self-report measure designed to assess hope in children 7 to 16 years of age. Three items on the CHS tap into agency (e.g., *I think I am doing pretty well*) and the other three reflect pathways thinking (e.g., *When I have a problem, I can come up with lots of ways to solve it*). A 6-point Likert scale is used with the CHS, ranging from *none of the time* to *all of the time*. In the process of development and validation of the CHS, the scale was administered to six samples of children with and without psychological, physical and behavioral concerns. Both internal and test-retest reliabilities were found to be adequate, and support for convergent validity was supported by positive relations between hope and higher self-perceptions of athletic ability, physical appearance, social acceptance and scholastic competence, and lower levels of depression.

The Adult State Hope Scale is a six-item self-report scale designed to assess goal-directed thinking in a given moment. Similar to the trait Adult Hope Scale, this measure includes items that tap into agency and pathways. Respondents are asked to rate items based on how they feel *right now*, and responses can range from *definitely true* to *definitely false*. Across four samples of college students, the State Hope Scale demonstrated good internal and test-retest reliability estimates, and hope scores were related to daily self-esteem and positive affect scores.

Other tools for hope measurement that have shown promising results from preliminary validation procedures include the domain-specific hope scale, the goal-specific hope scale, and the young children's hope scale.

## Research Findings about Hope

Efforts to study the role of hope in the lives of youth and adults have provided support for its utility as a construct that relates to well-being and several positive outcomes. Among adults, hope has been studied in terms of psychological adjustment, physical health, and academic and athletic performance. Findings have shown that high-hope adults form strong attachments to others, report having had close bonds to caregivers as children, and report less loneliness and more perceived social support. Furthermore, hope has been shown to be related to coping behaviors among individuals surviving illness and health concerns. For example, in adults coping with spinal cord injuries, arthritis, blindness and fibromyalgia, higher hope was associated with more adaptive coping, and among women with breast cancer, hope and emotional expression predicted perceived health and a sense of vigor.

In the domains of academic and athletic achievement, hope has also been found to relate to positive outcomes in adults. College students with higher hope have been shown to perform better on standardized achievement tests, and achieve higher grade point averages later in their college careers. Hope was also found to relate to female track performance in college, even after controlling for ratings of natural ability, self-esteem, confidence, and locus of control.

Among youth, hope has been shown to be associated with various positive constructs such as social acceptance and overall beliefs about their abilities to accomplish goals, as well as lower depression in children. Higher-hope adolescent burn survivors were found to engage in fewer behaviors that undermined recovery, and responded to caregivers more positively. Finally, high-hope girls attending a summer sport camp set more sport-specific goals and were less likely than low-hope girls to consider quitting their sports.

## Applications of Hope Theory

With research indicating that hope is a useful construct related to many positive outcomes, psychologists have recently attempted to develop programs and interventions that might enhance this construct among youth and adults. Efforts have been made at the individual and group level, in various contexts. Among adults, three hope groups devoted to improving mood and treatment outcome have been evaluated. In one study, older adults with depression who received group therapy about goal-setting and hope demonstrated decreased anxiety, depression, and hopelessness, and increased levels of state hope in comparison to a group of adults who received a reminiscence therapy group. Similarly, college-aged adults who participated in an 8-week group about hope reported decreased levels of depression and anxiety and increased levels of hope. Finally, a 5-week pretreatment orientation



group about hope led to improvement in clients' overall well-being, coping, and symptomatology.

As a final example of an application of hope theory with adults, a relationship enrichment intervention was designed for couples which focused on hope and mutual goal-setting. Couples who participated in this intervention demonstrated increased partner satisfaction of adjustment and quality of couple skills, and higher satisfaction.

Several promising programs have been developed to enhance hope among children and adolescents. One of the first interventions aimed at increasing hope in children involved learning about hope theory and discussing stories about high-hope children. Children's hope was assessed with the CHS before and after the 8-week program, and results demonstrated improvement on both self-report and teacher ratings of students' hope.

Another set of interventions, called Making Hope Happen, was developed by faculty and graduate students in counseling psychology at the University of Kansas. These 5-week programs were designed for 4th, 7th and 9th grade students. The sessions involved activities and lessons related to learning about hope and applying hope concepts to students' lives. For example, participants played hope games, designed hope cartoons with pathways and agency thoughts, and worked on personal goals that they described in a hope story. Pre- and post-test scores of hope demonstrated significant improvements in hope scores across all groups.

## Future Directions

Various definitions of hope provided by researchers have led to differing measures and theoretical propositions. Snyder's conceptualization of hope has been most frequently studied, and findings have demonstrated that hope is a useful construct in the lives of youth and adults. Work in this area is not definitive, however, as hope measurement has yet to be understood with methods beyond self-report, or with individuals from diverse cultural backgrounds. In addition, the growth (and loss) of hope over time is an area ripe for future research.

Many avenues for continued investigation of hope exist, as well as opportunities for the development and appropriate evaluation of prevention and intervention efforts for enhancing hope among youth and adults. Researchers and clinicians who apply hope theory can continue to study the value of nurturing hope by utilizing rigorous methodology including control groups and random assignment of participants to conditions.

SEE ALSO: ► Applied positive psychology ► Character strengths (VIA)  
► Optimism ► Self-efficacy ► Snyder, C. R.

## Humanistic Psychology

Frederick J. Wertz<sup>a</sup> and Sara K. Bridges<sup>b</sup>

<sup>a</sup>*Fordham University*; <sup>b</sup>*The University of Memphis*

Primarily, humanistic psychology is a diverse movement rather than a fixed set of methods and dicta. Some common themes in the work of humanistic psychologists are the primacy of purposive, first person subjective experience; the capacity of the person to transcend creatively given biological and environmental conditions; the propensity for social engagement and responsibility; and necessity of contextual, holistic understanding. Humanistic psychology has contributed scientific research and theories that aim at a conceptualization of the human condition, professional practices that endeavor to improve human welfare, research methods that broaden and enhance the science's investigative capability, and a dialogue with such humanities as philosophy, literary studies, and theology that expand the intellectual scope of psychology. This orientation in psychology shares much with the broader historical movement of humanism, which may be traced to the ancient Greeks and which flourished in the European Renaissance. Humanists stress the human being's potential to illuminate the world through conscious awareness, to bring about effective change in shaping the surroundings, and to engender goodness and beauty. Humanists insist that these virtues are rooted in the intrinsic characteristics of the human person, independent of divinity and materiality. Although humanists may be religious or secular, may utilize or criticize the methods and tenets of natural science, their primary focus is on the unique qualities of the human being that cannot be derived from received religious revelation or natural scientific theory and research. Humanists' conviction that persons take priority over ideas makes them critical of the limits of received ideas and methods, thus they are nondogmatic and open to various ways of knowing. They argue that characteristics of the human being demand fresh and diverse thinking and research.

Humanistic currents have been present in the modern science of psychology from its very beginning and throughout its history. The founder of psychology, Wilhelm Wundt, embodied humanistic principles in the "folk psychology" of higher mental processes and cultural life. Such American pioneers as William James, with his nonreductive description of human experience, and John Dewey, with his holistic emphasis on the self-directedness of the person, produced strong and generative humanistic psychology. The first to coin the term *humanistic psychology* was Gordon Allport in the 1930s, when other personality psychologists such as Henry Murray and Gardner Murphy and such neo-Freudians as Erik Fromm and Karen Horney were also developing new approaches to psychology. These psychologists were introducing an image of the person, in contrast to the determinisms of behaviorism and orthodox psychoanalysis that highlights conscious experience and the potential for creative self-determination and responsible social engagement. The orientation crystallized as a deliberate movement with the leadership

of Abraham Maslow, who in the 1950s facilitated communication among a professional organization of an increasing number of like-minded psychologists. Because these psychologists were unsatisfied with the limits of psychoanalysis – the study of psychopathology, and behaviorism, based on experimentation with animals – Maslow named this new psychology of the healthy and thriving human being “the third force.” The movement gained visibility when, in a strenuous debate with B. F. Skinner on the theoretical issue of freedom versus determinism, Carl Rogers powerfully argued for the human being’s capacity for self-determination. Journals and professional societies emerged in the 1960s, and humanistic approaches to psychology have since been developing in virtually all its subfields.

Humanistic contributions to professional practice were led by Carl Rogers, who revolutionized psychotherapy and counseling. This challenge to psychoanalysis suggested that persons are capable of self-direction and possess within themselves positive resources for addressing the challenges of human life. Personal experience and research led Rogers to the “growth hypothesis,” that the interpersonal environment facilitates psychological growth when a “helper” offers unconditional positive regard (prizing, love), empathic understanding (grasping the internal meanings of the person’s experiential process and the ability to convey this understanding back to the person), and transparency (genuine, honest self-expression). Offered such a relationship in individual and group contexts, the client becomes more “fully functioning” – more open to experience, self-acceptant, in control of and responsibility for his/her own life, and compassionate and helpful to others. Fritz Perls’ gestalt therapy, Albert Ellis’ rational-emotive therapy, Alvin Mahrer’s experiential psychotherapy, Eugene Gendlin’s focusing, and Les Greenberg’s emotion focused therapy have developed explicitly within the humanistic psychology tradition. Rogers went on to apply growth hypothesis and person-centered practices to a broad range of areas including education and international peace work. In a similar vein, Maslow developed the concept of eupsychia, a social organization that promotes psychological health, and offered a range of applications most notable in organizational psychology. Maslow contrasted management theory x, in which leaders adopt a mistrustful and controlling relationship to workers, with theory y, in which leaders trust and emphasize responsibility, cooperation and synergy with their workers. Humanistic practice, whether in psychotherapy, counseling, education, industry, peacework, or any human service, treats people with respect, honors their experience, and invites their collaboration as equals in the democratic shaping of a better world.

Humanistic theories have developed in the study of a broad range of subject matter by such psychologists as Gordon Allport, Henry Murray, Gardner Murphy, George Kelly, Brewster Smith, and Abraham Maslow. Maslow’s motivational theory holistically integrates such limited theories as the operant conditioning theory of learning and the psychoanalytic theory of ego defense by postulating a complex process featuring the person’s potential for growth through the gratification of basic needs for physiological equilibria, safety, belonging, and self-esteem. According to Maslow, the human being attempts to fulfill these prepotent deficiencies

(“D-values”) in a larger effort towards “self-actualization,” – the fulfillment of unique talents and potential. Maslow characterized such higher aspirations as “being” motivation (B-values) that are evident in “self-actualizers,” the most psychologically healthy persons, and in “peak” and “plateau” experiences enjoyed in diverse contexts of human life. In his holistic theory, Maslow acknowledged not only inherited tendencies, biological needs, propensities for reinforcement, and defenses against psychological conflict, but such cognitive, social and spiritual “metaneeds” as striving for truth, justice, and mystical connection with ultimate realities.

Humanistic psychologists have made extensive use of the received research methods of hypothesis testing by quantitative analysis. Rogers pioneered scientific research on the process and outcome of psychotherapy and humanistic psychologists have contributed empirical research over a wide range of subject matters. They have also recognized the need for methodological pluralism that includes experientially based, qualitative methods. Allport argued for the rigorous, scientific use of personal documents such as interviews, journals, and creative works. Drawing on the “human science” tradition articulated by Wilhelm Dilthey and Edmund Husserl early in the twentieth century, Amedeo Giorgi used European phenomenological scholarship to develop research methods uniquely suited to the study of complex human experiences and meanings. Giorgi addressed basic scientific issues of validity and generalizability of qualitative research. These methods have been used, beyond studies of personality and psychopathology, to study the full range of psychological subject matter including learning, perception, cognition, social life, intervention efficacy, and spirituality. The human science approach argues for the primacy of description and understanding in the conduct of research with human beings in contrast to the use of methods that stress explanation and prediction by quantitatively analyzing aggregate data. Distinctively humanistic research methods drawing on such traditions as existentialism, hermeneutics, narrative theory, and post-modernism emerged and continue to flourish in the humanistic psychology of the twenty-first century. As psychology has become increasingly accepting of qualitative research methods, humanistic psychologists are working on their integration with the quantitative in “mixed methods” paradigms.

Affirming the scientific character of psychology, humanistic psychologists have engaged in a careful dialogue with the humanities and allowed works in philosophy, literary studies, art criticism, and theology to play a formative role in their own work. From the beginning of the movement, James Bugental, Clark Moustakas, and Rollo May drew inspiration and insights from phenomenological and existential philosophy, literary works, and the fine arts. Although psychologists have drawn heavily on the tradition of secular humanism, many humanistic psychologists have acknowledged the spiritual potential of the human being. Similar to William James who, as a general psychologist, extensively investigated religious experience, Maslow’s study of “peak experiences” led him to gather knowledge of human transcendence and the study of religion from a psychological perspective.

Because of its rise during the 1960s and its connections with such West Coast institutions as the Esalon Institute, which frequently offered workshops with its leaders, this approach to psychology became associated with the popular human potential movement. Humanistic psychologists shared critiques and protests pointed at conformist and homogenizing cultural trends, racial and gender oppressions, dehumanizing bureaucratization and consumerism, and the Vietnam War. Some critics of humanistic psychology have overidentified humanistic psychology with popular cultural trends and have accused humanistic psychology of such excesses as narcissistic self-absorption and indifference to the problems of human social life. Although instances of such excess may be found, the movement's scientific contributions to professional practice, theory and research methodology are abundantly evident, and the centrality of the movement's focus on responsible social values and practice cast doubt on the identification of the movement with narcissistic individualism and any passing popular subculture. Moreover, the distinguished place of humanism in Western history, its presence in psychology prior to the 1960s, and the breadth of scientific achievements within the movement distinguish it from trends in popular culture.

Humanistic psychologists have frequently debated whether they should centralize themselves as a distinct school of thought or integrate a humanistic vision seamlessly through the various subfields of psychology. The former alternative led Maslow and Anthony Sutich to found the *Journal of Humanistic Psychology* in 1961 and the Association for Humanistic Psychology in 1963. The first conference on theoretical issues in humanistic psychology was held in 1964 at Old Saybrook, CT, with Allport, Bugental, Buhler, Kelly, Maslow, May, Moustakas, Murphy, Murray, and Rogers. In 1971, the Division of Humanistic Psychology (Division 32) was established in the American Psychological Association, and its journal *The Humanistic Psychologist* is still in publication today. Educational institutions such as Saybrook Institute and graduate programs at Duquense University, the University of Dallas and Seattle University have developed training programs in humanistic psychology. These venues have provided centralized institutionalization for the networking and dissemination of scholarship that identifies itself as humanistic. The integration of humanistic psychology in contemporary psychology may be seen in current emphases on the breadth of human experience, self-determination, and social/ethical responsibility in theory, research and professional areas ranging from industry to education. Humanistic psychologists' future directions are reflected in the current interest groups of the APA's Division of Humanistic Psychology: human science and research methodology, psychotherapy, constructivist psychology, psychology and the arts, transpersonal psychology, and positive psychology.

Several self-proclaimed humanists such as Allport, Rogers, Maslow and more recently Frank Farley have been presidents of the American Psychological Association. Other leaders affiliating with the institutions of humanistic psychology include David Bakan in research methodology, Carmi Harari in international psychology, E. Mark Stern in psychotherapy and the psychology of religion,

Brewster Smith in social psychology, Stanley Krippner in transpersonal psychology, and Fred Massarik in industrial organizational psychology. Recent compilations of the diverse work in humanistic psychology (e.g., work by Schneider, Bugental, and Pierson; and by Wertz) demonstrate the current vitality of the movement. Many seminal contributors to contemporary psychology without this affiliation have arguably adopted a humanistic orientation, perhaps as a response to the intrinsic demands of the subject matter. For instance, Albert Bandura in the psychology of learning and personality, Carol Gilligan in developmental psychology, Robert Sternberg in the psychology of intelligence, Heinz Kohut in psychoanalytic psychology, and Martin E.P. Seligman in clinical psychology promote a humanistic vision without a formal identification with the movement or its institutions. The current “positive psychology” approach may be viewed, in a significant part, as a recent manifestation of humanistic psychology.

SEE ALSO: ► Allport, Gordon W. ► Maslow, Abraham ► Rogers, Carl  
► Seligman, Martin

## Humility

June P. Tangney

*George Mason University*

Although humility is often mistakenly equated with a sense of unworthiness and low self-regard, *true* humility is a desirable character trait, one of a family of character strengths identified by the recent positive psychology movement. True humility entails an accurate assessment of one’s abilities and one’s place in the world, willingness to acknowledge one’s limitations, and a “forgetting of the self.” A scientific understanding of humility would provide informed guidance to parents, teachers, and social leaders who wish to foster the development of this virtue, for the benefit of individuals and society.

### What is Humility?

Complicating empirical study of the topic, there exist two widely held, but very different, definitions of humility. For many, humility simply means holding oneself in low regard. Abridged dictionaries are inclined to adopt a “low self-esteem” definition of humility, and this is the sense often adopted in common lay usage. Psychologists, philosophers, and theologians, in contrast, tend to favor definitions of humility that emphasize accuracy in perceptions of the self and one’s place in the universe. Drawing on these perspectives, positive psychologists have identified humility as one of the core human strengths or virtues.

In brief, the key elements of humility are thought to include:

- an accurate assessment of one's abilities and achievements (*not* low self-esteem, self-deprecation);
- an ability to acknowledge one's mistakes, imperfections, gaps in knowledge, and limitations (often vis-à-vis a "higher power");
- openness to new ideas, contradictory information, and advice;
- keeping one's abilities and accomplishments – one's place in the world – in perspective (e.g., seeing oneself as just one person in the larger scheme of things);
- a relatively low self-focus, a "forgetting of the self," while recognizing that one is but part of the larger universe; and
- an appreciation of the value of all things, as well as the many different ways that people and things can contribute to our world.

Of particular interest to psychologists is the notion that humility involves a relative lack of self-focus or self-preoccupation. From this perspective, the excessively self-deprecating person can be seen, in some important respects, as *lacking* humility, as with people who repeatedly protest, "Oh, *I'm* not really very good at X. *I* never did very well at X in school. My X certainly isn't as good as your X. What, this little X of *mine*? Really it's (*my* X) nothing." Such apparently humble protests betray a marked self-focus. The person remains at the center of attention, with the self as the focus of everyone else's consideration and evaluation.

A person who has gained a sense of humility is no longer phenomenologically at the center of his or her world. Templeton has described this as becoming "unserved," a process that goes hand in hand with the recognition of one's place in a larger world. In relinquishing the very human tendency to focus on the self, people with humility become correspondingly better able to recognize the abilities, potential, worth, and importance of other people.

Another important consequence of becoming unserved is that the need to enhance and defend an all-important self is greatly diminished. Having relinquished evaluative concerns, people become less vulnerable to "ego threats." There is less potential to feel shamed, humiliated, or otherwise psychologically threatened. In this way, people high in humility are theoretically less inclined toward defensive patterns of behavior (externalization of blame, reactive aggression, defensive self-enhancement, self-handicapping, etc.) that are likely to be counterproductive in the long run.

## What Humility is Not

Working from the "character strength" definition presented here, humility is *not* low self-esteem, nor is it an underestimate of one's abilities, accomplishments, or worth.

Humility is related to, but distinct from, modesty. The concept of modesty focuses primarily on "moderate" estimates of personal merit or achievement.

As such, “modesty” does not capture other key aspects of humility such as a “forgetting of the self” and an appreciation of the many ways others can be “worthy.” Rather, use of the term modesty often extends into issues of propriety in behavior and dress, where the construct of humility is less relevant. Thus, modesty is both too narrow, missing fundamental components of humility, and too broad, relating also to bodily exposure and other dimensions of propriety. One might view modesty – in the sense of an accurate, unexaggerated estimation of one’s strengths – as a component of humility.

Narcissism is the construct perhaps most closely related to humility. Narcissists clearly lack humility. It is not clear, however, that an *absence* of narcissism can be equated with the *presence* of humility. Social psychological descriptions of narcissism typically emphasize grandiosity, an exaggerated sense of self-importance and an overestimation of one’s abilities, as the primary defining features of narcissism. Narcissism, however, is a much richer dimension that has its roots in clinical psychology and personality psychopathology. Clinically trained theorists and scientists use the term narcissism to refer to a pathological form of self-focus and fluctuating self-regard that stems from fundamental defects in the self-system. From this perspective, a person high on narcissism is someone with a damaged sense of self. Other hallmarks of narcissistic personality disorder according to the *Diagnostic and Statistical Manual* (fourth edition, DSM-IV) include a pervasive self-focus, and a corresponding inability to attend to and empathize with others. But it is not clear that people who score low on a measure of narcissism necessarily embody humility. People low on narcissism may or may not make accurate assessments of their abilities and achievements. For example, low self-esteem, self-deprecating individuals are neither narcissistic nor paragons of humility. Similarly, people without narcissistic tendencies may or may not have the wisdom to keep themselves in perspective, mindful that they are but a small part of the larger scheme of things.

## **The Measurement of Humility: A Humbling Endeavor**

Scientific study of humility has only recently begun. Several factors have hindered research on humility. First, until recently, mainstream psychology steered clear of such value-laden topics as religion, virtue, and (with the exception of Kohlberg’s work on *forms* of moral *thinking*) morality. The construct of humility, linked as it is to values and religion in many people’s minds, has not been an attractive topic for inquiry. In fact, as a group, character strengths and virtues were relatively neglected in the first century of scientific psychology.

A second reason for the neglect of humility in scientific psychology is the problem of measurement. Traits such as humility are not readily inferred from quick observation. In addition, systematic behavioral observation methods are expensive and time-consuming. So there is a strong preference for paper-and-pencil questionnaires that require little time and training to administer and score. There is,



however, a potentially serious catch when it comes to assessing individual differences in humility via self-report. To the degree that a key component of humility is a “forgetting of the self,” self-reflection and self-report of one’s level of humility may be oxymoronic. Philosophers have observed that the truly humble person never knows that he or she is humble. From this perspective, scientific measurement of humility poses some daunting challenges, but a number of scientists have dared to take a plunge. There are four main approaches that have been used to assess humility: low self-esteem, direct self-report, self-other rating discrepancy, and implicit-based operationalizations of humility.

In early studies, humility was operationalized as low self-esteem. Such an approach is obviously inconsistent with broader conceptualizations of humility as a character strength. In fact, theoretically, scores on self-esteem measures scales should be positively correlated with (although not identical to) individual differences in humility. Consider the types of items included in a widely used self-esteem scale (rated on a 1–5 scale, from *always false* to *always true*): “I feel that I’m a person of worth, at least on an equal plane with others,” and “I feel I have a number of good qualities.” A person with a true sense of humility would be expected to endorse such items positively, not negatively.

With the advent of the positive psychology movement, there have been several efforts to develop direct self-report measures of humility. Using a forced-choice format to circumvent social desirability biases, Emmons developed a self-report measure tapping the diverse components of humility described by philosophers and psychologists. Unfortunately, although well-crafted in design and content, Emmons’ initial analyses of the measure’s internal reliability were disappointing, and he is now rather skeptical that this construct can be adequately assessed via self-report. More recently, efforts to develop self-report scales have been described by Hill, Rowatt, Peterson, Seligman, and their colleagues. Like Emmons, Hill reported low internal consistency and, in addition, low correlations among sub-components of self-reported humility. The 10-item humility subscale from the Values In Action Inventory of Strengths appears most internally consistent.

Because of concerns with social desirability and measurement reactivity, other researchers have turned to more indirect, or implicit, measures of humility. Rather than asking people to reflect on and report the degree to which they are humble, people are asked to *do* something, and based on interpretations of their behavior, researchers make *inferences* about their level of humility.

The rating discrepancy approach is one such method for indirectly assessing (or inferring) humility. Participants’ self-ratings are compared to some other reference perspective to infer humility. Of interest is the degree to which people under- or overestimate the self’s qualities or abilities. There are several variations on this theme.

Some studies have used ratings of the participant by “knowledgeable others” as the reference against which self-ratings are compared. For example, some researchers have operationalized workers’ modesty by calculating differences between self-ratings and ratings made of them by knowledgeable others (e.g., supervisors and

coworkers). Those who rated themselves lower than did their supervisors were viewed as showing a “modesty bias.” Those who rated themselves higher than did supervisors were immodest. Like the low self-esteem approach, this particular operationalization is inconsistent with current conceptualizations of humility. Given that humility theoretically entails an *accurate* assessment of one’s abilities, one could argue that high humility should be indexed by high levels of *agreement* between self and other, not self-deprecating discrepancies. In other words, when considering ratings by knowledgeable others, a more theoretically-consistent approach would be to focus on absolute values of such difference scores, with small values indexing greater humility (accuracy in self-perception) and large (absolute) values indexing less humility. By focusing on absolute values, low humility could be of two sorts – under- or overestimates of valued self characteristics.

Another type of discrepancy approach to assessing humility was utilized by Rowatt and colleagues in 2002. Here the reference perspective used for self-ratings was participants’ ratings of others (rather than others’ ratings of the self, discussed above). The assumption underlying this approach is that on average, people are average. If a person consistently rates him- or herself higher than others, that person would be viewed as showing a bias away from humility. If a person rates him- or herself as about on par with others, that person would be demonstrating humility. (The sample used by Rowatt and colleagues demonstrated a self-enhancement bias on average, as is typically observed in US samples. Few participants rated themselves lower than the average person. Thus there were relatively few self-deprecating discrepancies.) Although intuitively appealing, this approach does not take into account real individual differences in abilities. Some people actually *are* smarter, faster, kinder, or less sinful than others. Using this approach, one can’t disentangle objective individual differences in rated qualities from individual differences in humility. In the absence of some benchmark, some objective assessment of the trait, the procedure is best restricted to traits or qualities on which there is little variability to begin with (e.g., one’s worth in God’s eyes, or one’s worth as a human being), especially from the perspective of a person high in humility.

Finally, the most recent, inventive approach to assessing humility is Rowatt and colleagues’ Humility-Arrogance Implicit Attitudes Test (IAT). Borrowing methodology from the stereotyping literature, Rowatt and colleagues measured reaction time to self- and other-related words variously paired with humility and arrogance words. A person who is relatively quick in processing self-words paired with humility words is inferred to be high in humility. Note that, like the rating discrepancy approach, people are not required to evaluate and report where they rank on the humility dimension. Instead, the experimenter *infers* level of humility from performance on the humility IAT task. The IAT is, thus, an implicit index of humility presumably immune from self-presentational biases.

It is uncertain which of these four approaches offer valid, feasible measures of humility. Given the nature of the construct, any definitive conclusion about measurement validity would require multiple methods (e.g., observed behavior

and self-report) and multiple informants (e.g., ratings of experts, significant others). Recently, Rowatt and colleagues took an important step in this direction, examining the psychometric properties of four self-report and one behavioural measure (IAT) of humility in a sample of undergraduates. Importantly, for a subsample of 53 participants, ratings were obtained from significant others. Results indicated that: a) self-report measures of validity are highly intercorrelated; b) implicit IAT-assessed humility is stable over time and modestly correlated with self-reported humility, and most important; c) independent ratings of humility by significant others were modestly related to IAT humility, more closely linked to self-reports of humility, and, among the self-reports, were most highly correlated with the VIA-IS humility subscale. Taken together with findings summarized below, the initial data appear especially promising for the implicit IAT and VIA-IS self-report measures of humility.

## What Have Scientists Learned About Humility?

Although empirical research on humility is still in its infancy, substantial progress has been made in the measurement of this elusive construct, and scientists now know a good deal more than they did a few short years ago. Research indicates that, grim dictionary definitions notwithstanding, people are inclined to view humility as a positive, desirable characteristic, one associated with good psychological and social adjustment.

Bearing out people's intuitive sense, self-reports of humility are positively correlated with self-reports of other desirable social and psychological characteristics (e.g., self-esteem, satisfaction with life, agreeableness) and negatively correlated with self-reports of undesirable characteristics (e.g., narcissism, neuroticism, etc.). This does not appear to simply reflect method variance or social desirability concerns. Although the magnitude of effects are somewhat smaller, implicit IAT-based humility scores are also positively correlated with self-reported favorable characteristics, and inversely related to self-reports of unfavorable characteristics. Similarly, in the self-enhancement literature, researchers have repeatedly observed that people who rate themselves more favorably than others rate them are more likely to evidence psychological problems than their less self-enhancing peers. One notable exception to the link between humility and positive personal characteristics comes from a study by Rowatt and colleagues in which religiosity was negatively related to humility, operationalized as the difference between ratings of self vs. others in terms of adherence to biblical standards. Highly religious individuals were *more* inclined to adopt a "holier than thou" stance than less religious individuals.

A few studies examining the implications of humility have moved beyond self-reports to actual behavioral outcomes. Rowatt and colleagues found that IAT humility scores positively predicted actual course grades at the end of the semester. Self-report measures of humility were not reported. In another study,

Rowatt and colleagues found that both IAT and self-report measures of humility predicted subsequent helping behavior, especially under conditions of low pressure-to-help. As found by Rowatt and colleagues, of the humility measures examined, the VIA-IS stood out as a particularly robust predictor, validating the link between self-reports of humility and self-reports of forgiveness observed by a number of researchers. Exline, Bushman, and colleagues found that people who were successfully primed to experience humility (e.g., who wrote personal accounts of a non-self-deprecating humility experience) were slower to retaliate in response to provocation on a laboratory task. In contrast, individuals primed to feel morally superior judged another person's transgression more harshly and as less forgivable.

Finally, basic research on the self and its operations suggests that humility may be a relatively rare human characteristic, particularly in Western societies. The pervasiveness of "self-enhancement biases" is underscored in the social psychological literature. Research demonstrates that the self is remarkably resourceful at accentuating the positive and deflecting the negative. For example, studies consistently show that people are inclined to take credit for their successes, but blame other factors for their failures and transgressions. People are also more likely to notice, think about, and remember positive information about themselves, whereas negative information is more apt to be "lost in the shuffle."

## **Looking Forward to the Next Decade of Research on Humility**

As one of the classic virtues, humility has a well-deserved place in positive psychology. People rightly view humility as a positive, desirable characteristic that is associated with good psychological and social adjustment. Consistent with age-old wisdom, a sense of humility appears beneficial for both the individual and his or her social group. Researchers have documented a link between humility and such positive behavioural outcomes including academic success, helping behavior, and forgiveness. But this is nearly virgin territory, and many intriguing questions remain. Is humility equally adaptive across domains? If so via what mechanisms? Are there circumstances in which humility is liability? Are there important gender and/or cultural differences in the meaning and implications of humility? How can parents, teachers, and therapists foster an adaptive sense of humility? Certainly at the top of the research agenda is the need for continued efforts to develop a well-articulated theoretical framework and associated psychological measures of both state and dispositional humility. Scientists are now well on their way toward developing a clearer picture of this long-neglected source of human strength.

SEE ALSO: ► Character strengths (VIA) ► *Diagnostic and Statistical Manual*  
 ► Moral judgment ► Religiousness ► Virtues

# Humor

Rod A. Martin

*University of Western Ontario*

Humor refers to a rather broad set of phenomena associated with the creation, perception, and enjoyment of amusing, comical, or playfully incongruous ideas, situations, or events. The word *humor* is variously used to refer to an amusing *stimulus* (e.g., a joke, witty comment, or comedy film), the *cognitive process* involved in the creation or perception of funniness, the mirthful *emotion* that is associated with it, and a *personality characteristic* having to do with the tendency to enjoy humorous incongruity or the ability to amuse others and make them laugh. The term was used more narrowly in the nineteenth century to refer only to benevolent and sympathetic forms of amusement (“laughing with”), and was sharply distinguished from *wit*, which was viewed as more aggressive and less socially desirable (“laughing at”). Today, however, humor is a broad umbrella term referring to comedic amusement involving all sorts of verbal and nonverbal, intentionally and unintentionally funny events, regardless of the level of aggressiveness.

## Components of Humor

Humor is essentially a form of play, a type of activity in which people take an unserious attitude toward the things they say and do, engaging in these actions for their own sake, rather than having a more important goal in mind. It is also typically a social activity: people engage in humor and laughter much more frequently when they are with others than when they are alone. Thus, humor may be viewed as a form of social play. Not all play, however, is humorous or “funny.” Humor is distinguished from other forms of play by the presence of elements that are perceived to be incongruous, odd, unusual, surprising, or out of the ordinary. Thus, as many theorists have noted, for humor to occur there needs to be a particular type of cognitive appraisal involving the perception of nonserious incongruity.

Koestler coined the term *bisociation* to refer to this cognitive process, in which a situation or idea is simultaneously perceived from the perspective of two self-consistent but normally unrelated and even contradictory schemas or frames of reference. A simple example is a pun, in which two different meanings of a word or phrase are activated simultaneously. Many theorists have argued that this type of nonserious incongruity forms the basis of all forms of humor, including jokes and amusing anecdotes, conversational witticisms, teasing, ridicule, unintentional types of humor such as amusing slips of the tongue or the proverbial person slipping on a banana peel, and the laughter-eliciting peek-a-boo games of young children.

The perception of humorous incongruity in a playful context typically also elicits a specific positive emotion that, although closely related to joy, is uniquely associated with humor. Martin proposed the term *mirth* as a technical name for this emotion. The emotional nature of humor is demonstrated by recent brain imaging studies showing that exposure to humorous cartoons activates the well-known dopaminergic reward network in the limbic system of the brain. Depending on how amusing a stimulus is perceived to be, the emotion of mirth can range from mild feelings of amusement to very high levels of hilarity. Like other emotions, mirth is associated with a range of biochemical changes in the brain, autonomic nervous system, and endocrine system, producing effects on many parts of the body, including the cardiovascular, musculoskeletal, and immune systems.

Also like other emotions, mirth has an expressive component, namely smiling and laughter. At low levels of intensity, it is expressed by a faint smile, which turns into a broader grin and then audible chuckling and hearty laughter as the emotional intensity increases. Thus, laughter is a nonverbal vocal-behavioral expression communicating to others that one is experiencing the emotion of mirth, just as scowling, shouting, and clenching one's fists communicate the emotion of anger. Recent research suggests that an additional function of laughter is to induce mirthful emotion in others as well. The peculiar sounds of laughter appear to activate particular areas of the brain that are closely linked to humor and laughter, inducing mirth in listeners and causing them to laugh also. This explains why laughter is so contagious; it is difficult to remain serious when hearing others laugh. In summary, humor may be viewed as a positive, play-related emotion that is elicited by the cognitive appraisal of nonserious incongruity, usually occurs in an interpersonal context, and is expressed by smiling and laughter.

## Evolutionary Origins

Humor and laughter are a universal aspect of human experience, occurring in all cultures and virtually all individuals throughout the world. Although different cultures have their own norms concerning the suitable subject matter of humor and the types of situations in which laughter is considered appropriate, the sounds of laughter are indistinguishable from one culture to another. Human infants begin to laugh in response to the actions of other people by about four months of age. The innateness of laughter is further demonstrated by the fact that children born deaf and blind have been reported to laugh appropriately without ever having perceived the laughter of others.

Interestingly, though, humans are not the only animal that laughs. Chimpanzees and other apes also display a form of laughter, which is described as a staccato, throaty, panting vocalization. Ape laughter is typically associated with the relaxed open-mouth display, or "play face," and is emitted during playful rough-and-tumble social activities such as wrestling, tickling, and chasing games. In addition to laughter, there is evidence that apes may even have the capacity for a rudimentary

sense of humor. Chimpanzees and gorillas that have been taught to communicate by means of sign language have been observed to use language in playful ways that are very reminiscent of humor, such as punning, humorous insults, and incongruous word use.

These lines of evidence suggest that humor and laughter in humans are products of natural selection. Laughter appears to have originated in social play and to be derived from primate play signals. With the evolution of greater intellectual and linguistic abilities, humans have adapted the laughter-generating play activities of their primate ancestors to the mental play with words, ideas, and concepts that we now call humor.

## Psychosocial Functions

Although it may seem to be unserious and frivolous, humor appears to have several important psychosocial functions.

### Cognitive and Social Benefits of the Positive Emotion of Mirth

One of the apparent functions of humor has to do with the positive emotion that it elicits. Fredrickson has proposed a “broaden-and-build” model of the psychological functions of positive emotions in general, including humor-related mirth. Unlike negative emotions such as anger or fear, which tend to narrow one’s focus of attention and motivate one to engage in specific actions, positive emotions, according to this theory, serve to *broaden* the scope of the individual’s focus of attention, allowing for more creative problem-solving and an increased range of behavioral response options, and they also *build* physical, intellectual, and social resources that are available to the individual for dealing with life’s challenges.

Support for this model has been provided by a considerable amount of experimental evidence showing that the induction of positive emotions (including comedy-induced mirth) produces improvements in a variety of cognitive abilities and social behaviors. These include greater cognitive flexibility, allowing for more creative problem-solving; more efficient organization and integration of memory; more effective thinking, planning, and judgment; and higher levels of social responsibility and prosocial behaviors such as helpfulness and generosity. One way that humor likely provides important psychological benefits, then, is by inducing a positive emotional state that is typically shared among two or more individuals, and has important cognitive and social benefits.

### Interpersonal Communication and Influence

Another function of humor relates to its important role in interpersonal communication and the formation, maintenance, and regulation of social relationships. The pleasurable, contagious emotion associated with sharing humorous

experiences and laughing together can increase feelings of attraction between people and enhance interpersonal bonding and group cohesion. In addition, because of its inherently ambiguous nature due to the multiple concurrent meanings that it conveys, humor is often used for communicating messages that might be difficult to convey using a more serious mode of communication. Importantly, a message expressed in a humorous manner can be retracted if it is not well received, allowing both the speaker and the listener to save face. For example, humorous joking and teasing can be a way for partners in a close relationship to express differences of opinion, disapproval, criticism, or requests for favors in a relatively nonconfrontational and face-saving manner.

Although humor may be used in friendly ways to enhance relationships and ease tensions between people, it can also be used for more aggressive and even coercive purposes, taking the form of disparagement, mockery, sarcasm, aggressive teasing, or ridicule. For example, by laughing at particular characteristics or behaviors of outsiders, members of an ingroup can enhance their feelings of group identity and cohesiveness while excluding and emphasizing their differences from members of the outgroup. Many jokes are based on stereotypes making fun of members of a particular gender, race, religion, sexual orientation, or nationality. Cases of schoolyard bullying and sexual or racial harassment in the workplace also commonly involve aggressive uses of humor, teasing, and practical jokes. Since being the target of others' laughter is painful and something that most people seek to avoid, aggressive forms of humor can also be used as a method of coercing people into conforming to desired behavior patterns. Thus, humor can be used for a variety of contradictory purposes, bringing people closer together or excluding them, resolving conflicts or avoiding dealing with problems, reducing status and power differences or dominating over others.

Aggressive aspects of humor and laughter have long been recognized by philosophers and writers. Biblical references to laughter are nearly all associated with derision and scorn, and the oldest theories of comedy, dating to Plato and Aristotle, view it as essentially a form of aggression. Indeed, it is only in the past century that the more positive and prosocial aspects of humor have been emphasized.

### Tension Relief and Coping with Adversity

Another function of humor that has often been noted is its role in coping with stress and adversity. The ability to find humor in even the most difficult life circumstances is often seen as an important coping mechanism. Because it inherently involves incongruity and multiple interpretations, humor provides a way for the individual to shift perspective on a stressful situation, reappraising it from a new and less threatening point of view. As a consequence of this humorous reappraisal, the situation becomes less stressful and more manageable. In addition, the positive emotion of mirth accompanying the humor replaces the feelings of anxiety, depression, or anger that would otherwise occur. A considerable amount



of correlational and experimental research has provided evidence for the stress-buffering effects of humor.

## Sense of Humor

*Sense of humor* refers to trait-like individual differences in the perception, expression, or enjoyment of humor. In popular usage, a sense of humor is a very socially desirable personal characteristic that is commonly assumed to be associated with a variety of positive qualities such as sociability, cheerfulness, emotional stability, and intelligence. However, it is also a very vague concept, and there is little agreement about what exactly it means to say that someone has a sense of humor. For example, it may refer to individual differences in the types of jokes, cartoons, and other humorous stimuli that people find most amusing; the frequency with which they laugh and seek out humor; the ability to perceive or create humor; the tendency to tell jokes and amuse other people; the degree to which individuals understand jokes and other humorous stimuli; the tendency to use humor as a coping mechanism; the tendency not to take oneself too seriously and to laugh at one's own foibles and weaknesses; and so on. These varied popular conceptions of sense of humor (which are not necessarily highly intercorrelated) are also reflected in the many different ways it has been operationally defined in the research literature.

Much of the early research on sense of humor focused on individual differences in appreciation of jokes and cartoons containing particular themes, such as aggressive, sexual, political, scatological, or "sick" humor. More systematic factor analytic investigations, however, revealed that certain structural aspects of humor stimuli are more important determinants of appreciation than are their content themes. In particular, stable individual differences are consistently found in the degree to which people prefer humor in which the incongruity is largely resolved and makes sense in some way (incongruity-resolution humor), as opposed to more zany or bizarre humor in which the incongruity is largely unresolved (nonsense humor). Among other findings, preference for incongruity-resolution humor has been found to be correlated with conservative and authoritarian social attitudes, whereas preference for nonsense humor is related to openness and sensation-seeking.

As an alternative approach to studying individual differences, researchers during the past two decades have developed a number of self-report questionnaires assessing such aspects of sense of humor as tendencies to laugh and smile frequently, to perceive humorous aspects of the environment, to value humor, to maintain a cheerful mood and nonserious outlook on life, and to use humor as a means of coping with stress. These types of measures tend to be positively correlated with extraversion and modestly negatively related to neuroticism. Researchers have also approached sense of humor as an ability to create humor, which they have measured by means of humor creation tests. Scores on these tests tend to be correlated with measures of general creativity.

## Humor, Health, and Well-Being

There has been a great deal of interest in recent decades in potential health benefits of humor and laughter. It has been suggested that the physiological changes produced by the positive emotion of mirth may have a variety of beneficial effects, such as enhancing immune system functioning, counteracting pain, reducing blood pressure, and so on. Although the popular media frequently report claims of scientific evidence for these sorts of health-enhancing benefits of humor and laughter, more careful reviews of the research literature indicate that the evidence to date is quite inconsistent, with numerous methodological weaknesses making it difficult to draw firm conclusions. The most consistent evidence has been found for increased pain tolerance following exposure to comedy, suggesting an analgesic effect of humor-related mirth. Although studies have not been conducted to determine whether these effects are mediated by humor-induced increases in endorphins, this continues to be a viable hypothesis in need of further investigation.

In addition to hypothesized effects on physical health, a good deal of research has examined potential benefits of humor for emotional health and psychological well-being. As noted earlier, there is reason to view humor as a means of enhancing positive emotions, coping with stress, and maintaining relationships, all of which are important for psychosocial health. Until quite recently, most investigators have focused only on positive dimensions of humor, assuming that a sense of humor is always beneficial to mental health and positive relationships. More recently, however, researchers have begun to examine potentially detrimental as well as beneficial aspects. For example, research using the Humor Styles Questionnaire (HSQ) indicates that, whereas some styles of humor (affiliative and self-enhancing) are associated with positive moods, self-esteem, psychological well-being, intimacy, agreeableness, and relationship satisfaction, other styles (aggressive and self-defeating) are associated with poor psychological functioning, neuroticism, hostility, low self-esteem, and lack of social support. Thus, healthy psychological and interpersonal functioning appears to be related as much to the *absence* of certain deleterious forms of humor as to the *presence* of beneficial humor styles.

SEE ALSO: ► Amusement ► Laughter ► Smiles ► Well-being



## Immune System

Sarah D. Pressman and Anna L. Marsland

*University of Pittsburgh*

The field of psychoneuroimmunology (PNI) examines interactions between psychological factors, behavior, the brain, and the immune system. It is now over 30 years since it was first hypothesized that emotions could influence immune function and thus disease. Since then, many studies have shown reliable associations between negative emotions, such as depression, stress, and anxiety, and immune function. In contrast, little research has examined the effects of *positive affect* (PA) on immune function and susceptibility to immune-mediated diseases.

## The Immune System

The immune system is the surveillance system of the body, which identifies and destroys disease-causing microorganisms (pathogens), such as viruses and bacteria, as well as altered host cells such as tumor or infected cells. It consists of a number of organs and cells that work together to combat infectious illness. The first line of defense is provided by the skin and the mucus membranes of the digestive and respiratory systems, providing a physical barrier against invasion. If a pathogen penetrates this barrier, a second line of defense is provided by the cells that constitute the innate immune system, which is prepared to mount an immediate response that is normally sufficient to neutralize the invader. The cells of this system include macrophages, which live in tissue and consume invading organisms, recognize pathogens, and if necessary initiate an inflammatory cascade. The natural killer (NK) cell is another white blood cell that circulates in the

bloodstream and destroys any cells not recognized as belonging to the person, e.g., tumor cells. The third line of defense is the acquired immune system, which provides defense against specific invaders. This system is slow to respond the first time it is introduced to a pathogen. However, it mounts a much quicker response if it identifies the same pathogen again in the future. This system is responsible for the development of immune memory. The primary cells of this system are the B and T lymphocytes. These cells are genetically programmed to recognize a specific target. When activated by that target, B cells secrete antibodies that can neutralize the invader and cytotoxic T cells can destroy cells that have been invaded by a virus. Communication between cells in the immune system is via the release of chemical messengers, called cytokines. There are many different cytokines that direct the nature, magnitude and duration of the ongoing immune response. Two important classes of cytokines are released by helper T lymphocytes: the T helper type 1 (Th1) cytokines (interleukin [IL]-2, tumor necrosis factor [TNF]-beta and interferon [IFN]-gamma) that support T and NK cell activation and the Th2 cytokines (IL-4, IL-5, IL-6, IL-10 and IL-13) that support B cell antibody-mediated immune responses.

## Measuring Immunity

Human studies in PNI are generally limited to quantitative and functional assessment of immune parameters sampled from blood and mucus. Quantitative assessments in blood include the absolute numbers or percentages of specific populations of immune cells, including T and B lymphocytes, and NK cells. It is also possible to measure concentrations of cytokines and antibodies in serum and their local release in mucus secretions. Other measures provide more information about immune competence. These functional assays include the *in vitro* measurement of the ability of lymphocytes to proliferate in response to chemicals that stimulate cell division (mitogens). NK killer cell cytotoxicity (NKCC) is also frequently measured and reflects the ability of NK cells to destroy tumors. Other *in vivo* functional assays measure antibody responses to novel antigens, such as vaccination. Although greater antibody response is usually interpreted as better immunocompetence, elevated antibody levels to latent viruses, such as Herpes viruses may reflect a weakened ability of the immune system to keep such viruses from becoming active and are interpreted as indicating poorer immunocompetence.

## Empirical Evidence

Empirical evidence links positive emotions and dispositions (e.g., happiness, liveliness) to the immune system. The majority of these studies have been conducted in the laboratory where mood is experimentally manipulated and associated changes in immune function are assessed.

## Mood Induction Studies

The most common measure of immunity assessed in mood induction studies is secretory immunoglobulin A (sIgA) measured in saliva. SIgA is an important antibody that plays a role in defending against viral and bacterial infection. Consistent findings support increased total sIgA in response to various positive mood inductions (e.g., watching funny films, listening to music, reflecting on positive experiences). These studies tend to be well-designed with appropriate controls and timing of samples. Similarly, other studies have shown a positive relationship between PA and circulating levels of other antibodies (IgG and M). Importantly, two studies have shown that the increase in sIgA is similar in response to the induction of both positive *and* negative affect (NA). This suggests that it may be the *arousal* component of emotion and not the valence that is related to the increase in antibodies.

Induced PA has also been associated with a handful of other immune parameters, although these findings are harder to interpret. Most studies show PA-related increases in circulating numbers of NK cells, lymphocyte populations, and total leukocyte counts; however, not all findings are consistent. Studies of immune function are also mixed. Increases in PA have been linked to increased NKCC and greater cell proliferation in response to a foreign antigen; however, the role that emotional valence plays remains unclear. Interpretation of these mixed findings is limited by small sample sizes and a general failure to include neutral control conditions or to differentiate between high and low emotional arousal, making it premature to form any conclusions.

More recent attention in PNI has turned to relationships between emotions and circulating levels of cytokines. The health significance of systemic cytokines is difficult to interpret, as it is *regulation* of levels in response to a specific demand that confers immune efficiency. Nevertheless, a few studies provide evidence that induced PA is associated with increases in IL-2, IL-3, and decreases in TNF-alpha. Findings are less consistent for the cytokine IFN-gamma, with one study showing mood-related increases and another study reporting decreases. Finally, a study of circulating IL-6 among rheumatoid arthritis patients, who typically show elevated levels of this inflammatory marker as part of their disease process, found that watching a comedy was associated with a decrease in IL-6 level, which may be a marker of short-term health benefit.

A few studies have examined whether induced PA is associated with a more clinically meaningful measure of cellular immune function, allergic hypersensitivity reactions in response to allergens or histamine. In support of a health benefit of PA, a general reduction in allergic response was found when pleasantness, relaxation, or humor was induced by hypnotic suggestion, although one study failed to replicate this effect.

In sum, the most consistent findings suggest that positive mood induction is associated with increases in sIgA levels, numbers of immune cells in circulation, and possibly NK cell activity, suggesting an upregulation of parameters of innate

immunity. Interestingly, these findings are consistent with immune changes observed in response to the induction of activated negative moods, suggesting that the increase in affective arousal may be the active ingredient, rather than mood valence. Further evidence for this is derived from the few studies that show similar immune responses to both positive and negative moods.

### Naturalistic Studies of Positive Emotional States

Several well-designed studies investigating naturally occurring moods have found that immune benefits accompany PA. For example, daily levels of PA (and not NA) are associated with better immune response (sIgA) to a specific innocuous antigen that was experimentally ingested, as well as with a healthier cytokine profile the day after being experimentally infected with a cold virus (lower IL-6, IL-1 beta and TNF-alpha). Only one study found no effect of PA on nonspecific total sIgA possibly because specific challenge is a better gauge of immune function than more general markers. Further naturalistic studies are required to better understand these relationships.

### Naturalistic Studies of Positive Dispositions

Other naturalistic research has explored the relationship between a positive dispositional style and immunity. These studies show that higher levels of vigor and other measures of PA predict greater NKCC and lower antibody titers to EBV, suggesting a greater ability of the immune system to keep latent viruses from becoming active.

Higher levels of dispositional PA and optimism are also associated with more effective cellular immune function as measured by a greater cytokine response (IL-2 and IFN-gamma) to in vitro stimulation with live influenza virus or vaccine. Conversely, NA was associated with lower responses. These findings suggest that affect may influence T-cell memory (Th1 responses).

A more recent and clinically relevant vaccination study by our group similarly found that healthy students with higher dispositional PA mounted a higher antibody response to hepatitis B vaccination. This effect was independent of NA, which was not associated with vaccine response, as well as other control factors such as age, sex, body mass, smoking, alcohol use and exercise.

Finally, a few studies have examined associations between trait affect and immune responses among individuals with immune-related diseases. For example, in a population of individuals with active cold-sores, contentment was associated with higher numbers of NK cells and cytotoxic T cells and low happiness and hopefulness was associated with lower number of cytotoxic T cells. Similarly, higher liveliness and vigor have been associated with smaller skin responses to allergens among people with allergies.

In sum, available evidence from naturalistic studies examining mood across periods ranging from a few days to a couple of weeks suggests that PA is associated

with markers of improved immune function, including higher NK cell number and activity, greater control of latent viruses, and increased Th1 cytokine responses to in vitro stimulation with live influenza virus. It remains to be determined whether these changes are clinically significant. Of clearer clinical relevance are studies linking PA to increased numbers of circulating cytotoxic-T and NK cells among individuals with herpes, to a reduction in allergic response among individuals with allergies, and to improved antibody response to vaccination. These findings raise the possibility that PA-related changes in immune function are of health benefit.

## Future Directions

The literature examining PA and immune function is in its infancy. To date, the majority of studies have examined the impact of the induction of PA in the laboratory, with the remainder examining naturalistic occurrences of PA. Overall, findings suggest induced activated PA (e.g., vigor, humor) is associated with an upregulation of the innate immune system among healthy volunteers and a beneficial reduction in allergic responses. However, due to the similarity of immune responses to the induction of both positive and negative affective states, future work is needed to disentangle the valence and arousal dimensions of mood in a more sophisticated manner. Furthermore, to improve on the current literature, new experimental studies should utilize larger sample sizes, adequate neutral control groups (to account for passage of time, diurnal variation, and distraction) and examine the induction of other types of emotions (e.g., NA, low activation PA). Additionally, future work would benefit from confirmation of the specific moods induced by experimental manipulations. For example, humor is often used to induce PA; however, without evaluating the emotional response, it is impossible to know whether any changes in immunity are due to increases in humor or PA. Finally, from previous research we know that stable dispositional affect is most likely to influence health. Because experimental studies induce only momentary changes in mood, many questions remain regarding the influence of brief changes in PA on longer lasting well-being.

Of greater relevance for health are naturalistic studies that provide initial support for a relationship between trait PA and more effective cellular immune function. These findings raise the possibility that immune function is one mediator of observed associations between trait PA and better general health. However, again, caution is warranted given the small number of studies and the observation that immune responses typically remain within normal ranges. Future research is needed in this area to determine the clinical significance of these immune changes and the reliability of the few existing findings.

SEE ALSO: ► Cortisol ► Oxytocin ► Physical health ► Positive affectivity ► Psychoneuroimmunology

## Indigenous Positive Psychology

Steven J. Sandage and Merrishia Singh Naicker

*Bethel University*

*Indigenous positive psychology* is an emerging multicultural framework that promotes culturally-sensitive research and practice focusing on human strengths and virtues. A point of tension in positive psychology discourse is whether strengths and virtues are best understood as universal or culturally-embedded. Positive psychology researchers in western cultures have tended to employ an *etic* approach emphasizing universal categories and taxonomies. However, others have called for greater awareness of cultural and contextual dynamics that can influence differing construals of such value-laden constructs as virtue or well-being. An *emic* perspective emphasizes sensitivity to social context and culturally-particular understandings of a construct while also cautioning against premature transcultural applications of psychological theories and methods. Indigenous psychology is an approach that integrates the methodological strengths of both *etic* and *emic* perspectives and, therefore, holds promise for further developing positive psychology as both a culturally-sensitive and scientific field.

## Indigenous Psychology

Kim and Berry (1993) define indigenous psychology as “the scientific study of human behavior or mind that is native, that is not transported from other regions, and that is designed for its people” (p. 2). The emphasis is on studying psychological phenomenon in their natural contexts or ecologies using cultural frames of reference in conjunction with the diverse empirical tools of contemporary social science. The overarching goal is to “create a more rigorous, systematic, universal science that can be theoretically and empirically verified” (Kim, Yang, & Hwang, 2006, p. 6), but also a culturally-sensitive science that does not presume universality without careful testing.

Indigenous psychology is not the study of Native peoples or people living in Third World countries. Actually, all of psychology is indigenous to some cultural context. Presently, North America is probably the leading exporter of psychology but psychological theories and measures developed in North America are rarely identified as indigenous to that context. Indigenous psychology is needed for all cultural contexts rather than simply for cultures and contexts outside North America.

Indigenous psychology can be contrasted with both cross-cultural psychology and cultural psychology. *Cross-cultural psychology* is a field that typically involves comparing two or more cultures on a common set of measures, often using an *etic* approach. A limitation of this approach is that measures developed in western cultures are not always an appropriate fit in other cultural contexts. Transporting



theories and measures developed in the West for use in other cultures without adaptation can represent an ethnocentric imposition and lead to invalid research. Ho and Cheung theorized that the collectivism of Chinese culture would influence the subjective well-being of people in their context in Hong Kong in a manner not captured by more individualistic, Western measures of life-satisfaction. They developed and tested an extended satisfaction with life scale that included culturally-adapted items representing an interpersonal dimension of subjective-well being in addition to items from a standard Western measure. This could be described as *indigenization from without* or a *derived etic* approach in which existing theories or measures from outside are utilized but adapted to fit a different cultural context better. Ho and Cheung found the psychometric properties of the extended, culturally-adapted scale to be better than the standard Western scale with participants in their context. These findings are consistent with other studies that suggest there are cultural differences in understandings of well-being, which is one of the central constructs in positive psychology.

Kim and colleagues described *cultural psychology* as typically operating from a strongly contextualist and emic approach. There is considerable methodological heterogeneity within the body of contributions described as cultural psychology, but most contributions argue for understanding a culture within their own frame of reference. Numerous examples of this type of social science have offered valuable ethnographic, narrative, and anecdotal data. Like cultural psychologists, indigenous psychologists are very interested in the rich historical, philosophical, religious, and other cultural influences found within particular contexts. *Indigenization from within* is an approach that starts with indigenous information as the primary source for developing an initial descriptive understanding of a construct. Yet indigenous psychology is also a scientific tradition that calls for empirical testing and validation. A positive psychology construct, such as wisdom, might be understood differently in Kenyan and German traditions, and this could necessitate differing measures developed with linguistic expertise. But there is scientific value in moving beyond thick description of cultural differences to test correlates and interventions of such constructs within those differing contexts.

## Transformative Social Processes of Indigenization

At a macro level, societies can go through a process of creating an indigenous psychology. This involves transforming psychological theories and methods imported from another context (typically the West) to more appropriately fit another cultural context. Adair has empirically studied this process in numerous cultures (e.g., India, Bangladesh, Canada) and has identified some common stages of the indigenization process. In short, psychologists may return to their home culture from training in another context and import what they learned. Eventually, theories and methods may be critiqued and adapted to more accurately fit the indigenous context and to address local concerns. Adair refers to the final stage

as *autochtonization*, which is the emergence of a self-perpetuating indigenous discipline that can function independent of its imported sources.

Adair's model can be used to encourage positive psychologists who are invited to consult across cultures to consider whether their work is empowering of the development of the other culture or merely promoting dependence. His model highlights the important transition where psychologists integrate the use of outside training with the strengths of their own indigenous wisdom and contextual concerns. Positive psychologists can encourage this process by entering intercultural encounters with a listening posture and a commitment to start with indigenous wisdom. Efforts at developing an indigenous psychology, such as the Sikolohiyang Pilipino (Filipino Psychology) movement, have often highlighted the important power dynamics of the researcher-participant relationship and the question of who ultimately benefits from the research.

## Emerging Contributions to Indigenous Positive Psychology

Forgiveness is one of the virtues that has been widely investigated by positive psychologists over the past decade. A review by Sandage and Williamson has described ways in which the cultural dynamics of forgiveness are starting to be considered. For example, individualism and collectivism can shape differing motivations for interpersonal forgiveness (i.e., forgiving for personal benefit or relational benefit). Fu, Watkins, and Hui found support for this thesis in the People's Republic of China. They first interviewed Chinese scholars about forgiveness and explored classical Chinese texts. Then, they adapted a Western measure of forgiveness for a quantitative study of personality correlates with Chinese participants and found social solidarity to be the strongest motivation for forgiveness of others in that context. Qualitative studies of forgiveness with first-generation Hmong adults in the US have also revealed cultural practices previously not considered in Western psychological literatures, such as clan mediation of conflicts, quoting cultural proverbs from oral traditions, performing animistic sacrifices and face washing rituals, and sharing gifts and communal feasts.

Relational and family strengths and virtues are also receiving increasing attention in positive psychology, and relational dynamics are particularly relevant for understanding highly collectivistic cultures. For example, Kim and colleagues have described the Confucian virtues of *filial piety* (love, reverence, and obedience toward parents) and *human-heartedness* (love, sacrifice, and devotion from parents), but they have also conducted empirical studies in Korea to validate the significant role these indigenous concepts play in family dynamics and academic achievement. The Hindu relational virtue of *anaskati* or indifference and nonattachment seems to hold some resemblance to Western notions of differentiation of self and is beginning to be studied by Indian psychologists.

Future directions in indigenous positive psychology could involve better integration of basic and applied research. Chan and colleagues studied the bereavement

process of Chinese in Hong Kong. They found some continuities with findings in other cultures but also found some unique spiritual and cultural beliefs and rituals about death and the afterlife that were employed by the Chinese participants in coping with loss. This is part of a larger effort to develop an indigenous Chinese relational approach to counseling that could eventually be empirically tested.

Numerous indigenous and folk methods of healing exist around the world, and the cultural wisdom of such therapies could be further studied by positive psychologists. In Japan, Naikan therapy encourages the cultivation of gratitude and could be studied by positive psychologists interested in that virtue. *Toyi-toying* is a collective performance of energetic song and dance originally developed in Zimbabwe and used in South Africa for public demonstrations to bring about political awareness and social change. Psychologists in South Africa are using toyi-toying as a liberating embodied therapy for trauma. Process and outcome studies of indigenous therapies should utilize culturally-appropriate measures in respectful partnership with cultural brokers.

Finally, the intercultural development and multicultural competence of psychological researchers and practitioners is vital to the future of indigenous positive psychology. Psychology is a human science, and while degrees of objectivity are possible, developmental differences in strengths like multicultural competence will influence the perceptions and professional judgments of psychologists.

SEE ALSO: ► Buddhism

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## Individualism

Nicholas Sorensen and Daphna Oyserman

*University of Michigan*

*Individualism* as a cultural syndrome suggests that the individual is the basic unit of society and that societies continue to exist if they facilitate attainment of personal goals. The alternative perspective (termed *collectivism*), is that individuals make up social units and can only be understood in the context of these units and as related to particular others. The concept can be traced back to the late 1700s during the French Revolution when individualism was first used to describe the negative potential impact focusing on individual rights would have on larger societal welfare and structure. Current research in the area was highly influenced

by Geert Hofstede's 1980 book, *Culture's Consequences*, in part because he provided an integrated theoretical model linking societal differences in individualism to other important societal differences and in part because he provided an empirical approach with resultant nation-level scores. Between 1973 and 1978 Hofstede collected 32 work-related attitude and value responses from 60,000 IBM and subsidiary employees in 65 countries. Responses were factor analyzed and the factors were named, the first factor was named "individualism." Hofstede defined individualism as a focus on rights above duties, a concern for oneself and immediate family, an emphasis on personal autonomy and the basing of one's identity on personal accomplishments, and assumed that low individualism is synonymous with high collectivism. Though the latter assumption is open to question, his work has set the tone for the next quarter century's research and theorizing.

Since 1980, researchers have operationalized individualism in one of three ways: they used Hofstede's results to infer individualism, they directly assessed individualistic value judgments and attitudes, or they used experimental techniques to make an individualistic worldview come to mind. Using Hofstede's ratings to infer that samples from different countries are different in their level of individualism requires that researchers assume that Hofstede's results are both stable over time and that a country-level generalization is relevant for a particular sample. Hofstede disagrees with both of these premises.

Alternatives to simply using Hofstede's ratings are to directly assess attitudes or values relevant to individualism or to prime or temporarily trigger individualistic worldviews and examine the effects of this cued worldview on self-concept, ways of relating to others, bases of well-being, memory, perception and thinking more generally. Daphna Oyserman, Heather Coon and Markus Kimmelmeier reviewed these methods as part of a meta-analytic review of all English language studies published in the 20 years after Hofstede. In terms of direct assessment, they found that though no single scale dominates the field, individualism is most commonly operationalized as personal independence (collectivism is most commonly operationalized as obligation and duty to the ingroup). Assessments of individualism have also included items focusing on what might be considered theoretically relevant associated factors such as personal achievement, self-knowledge, uniqueness, privacy, clear communication and competition (assessments of collectivism include theoretically relevant associated factors such as relatedness to others, seeking others' advice, harmony, working in groups, sense of belonging to a group, contextualized self and valuing hierarchy).

In terms of ways to prime or cue individualism as a world view, Oyserman and Spike Wing-Sing Lee reviewed these methods as part of a meta-analytic review of all the published English language studies using any variants of this technique. They found six main ways that individualism was triggered in the moment. These include thinking of ways in which one is similar to (or different from) one's family members, reading a paragraph with first-person singular pronouns (or first-person plural pronouns) and circling them, or writing sentences using words related to individualism (or collectivism).

## Are Americans Individualists?

Americans believe they are individualists, free to pursue their personal version of happiness, not bound in by obligations and duties. Indeed, a core assumption in cultural psychology is that Americans are higher in individualism (and lower in collectivism) than other societies, particularly East Asian countries, reflecting a general contrast between East and West. Evidence in support of this assumption is reasonably strong; the Oyserman, Coon, and Kimmelmeier meta-analysis demonstrates moderate-sized differences in European Americans' individualistic (and collectivistic) attitudes and value judgments compared to others, particularly Africans, Eastern Europeans and Asians. There are some caveats to this generalization. European Americans are lower in collectivism than Europeans, challenging the notion of a single Western culture. Only small-sized effects are found for comparisons with Korea and Japan and these differences were contingent on how individualism and collectivism were assessed and were not always in the expected direction. Comparisons between European Americans and Americans from three large racial-ethnic minority groups demonstrate that Asian Americans are lower in individualism and higher in collectivism than European Americans, African Americans are reliably higher in individualism (and no different in collectivism) than European Americans, and Latin Americans are reliably higher in collectivism (and no different in individualism) than European Americans. Taken together, these findings support the general assumptions surrounding country-level differences in individualism but challenge the notion that these differences can be summarized as a general "East vs. West" cultural difference and highlight the within-area and within-society heterogeneity in levels of individualism (and collectivism).

## What does Individualism Influence? Implications of Individualism (and Collectivism)

Within an individualistic cultural frame, essential values are assumed to be individual freedom, personal fulfillment, autonomy and separation; relationships are chosen, voluntary and changeable, can be worked on and improved or left when costs outweigh benefits. A basic self-goal is to feel good about oneself as a unique and distinctive person and to define these unique features in terms of abstract traits. Open emotional expression, free choice and attainment of one's personal goals are important sources of well-being and life satisfaction. Judgments and causal reasoning are focused toward a salient focal object (e.g., the self) rather than connections and relations. These differences may be linked to differences in salient self-concept; because individualism is associated with focus on the self as private and separate from others, personal preference is likely to be a more salient basis for judgment and an important cognitive procedure would be to distinguish and separate (find the main point).

SEE ALSO: ► Collectivism ► Culture

## Innovation

Miguel Pereira Lopes<sup>a</sup> and Miguel Pina e Cunha<sup>b</sup>

<sup>a</sup>*Instituto Superior de Psicologia Aplicada, Lisbon, Portugal;*

<sup>b</sup>*Universidade Nova de Lisboa, Lisbon, Portugal*

*Innovation* refers to the actions that change what a person or an organization does and the way it does it. It involves a departure from current ways and the replacement of old ways. The management of innovation tends to be presented as a structured and planned process, driven from the top. However, innovation is a natural property of complex systems, as the accumulation of interactions between people naturally causes innovation to flourish. This means that innovation may be seen in both a macro- or microperspective. In the first case, the focus is on the positive organizational features that leverage innovation, whereas in the second case, the analysis addresses the positive social psychological phenomena that drive innovative outputs.

Regarding a macroview of innovation, organized contexts can be seen either as an obstacle or as an enabling factor. Organized settings act as an obstacle when they are understood as controlled contexts. In this case, the natural property of innovation is substituted by obedience and conformity, which tend to be found in bureaucratic or other similar contexts oriented toward the strict regulation of human behavior. It is possible however, even in organized and regulated contexts, to create positive environments, favorable to innovation. When organizations create contexts characterized by positive psychological energy, they tend to trigger the mindfulness and interest of their members, which in turn take the shape of new ways, things or processes. Research shows that this positive context tends to occur when a clear and shared vision is combined with minimal structuring, an appreciation of the aesthetics of imperfection and a sense of psychological safety. Minimal structuring, or the establishment of a small set of big rules, allows people to know what they are contributing to, while leaving ample space free for discovering and improving the organization and following their own developmental path. Minimally-structured contexts have been shown to produce the improvisations that stimulate emergent change and the renewal of the organization on a continuing basis. Minimally-structured contexts may also facilitate the creation of a culture appreciative of the aesthetics of imperfection, i.e., a culture that acknowledges the importance of errors and mistakes in the process of exploration of novelty. This exploration will be amplified in the presence of a psychological safety climate. *Psychological safety* refers to the willingness to share mistakes with others. It allows the person and the team to fuel the discovery process with new inputs, thus acting as a stimulus for improving and renewing. Positive contexts, in innovation terms, are those that provide the space and safety for people to deviate from current practice without the fear of punishment for what may come as a result.

Micro-views of innovation, in turn, put the emphasis on the individual and group-level creative processes underlying innovation. One of these positive processes is creativity. Although creativity may not be sufficient to drive innovation, it is normally deemed to be necessary. Creativity differs from innovation in that creative ideas must first be validated and their outputs evaluated. However, because creativity represents the ability to solve problems in new ways and to produce novel outcomes from existing resources, it strongly relates to innovation. Amabile has devised a model to explain how a creative idea turns into an innovation. The model includes three basic individual components: 1) having strong domain-specific skills, related to the one to which innovation is targeted; 2) possessing general creativity skills, such as problem-solving capabilities; and 3) intrinsic motivation, related to the personal gratification of achieving one's own goals.

Some positive psychological processes have been shown to influence creativity and innovation. Csikszentmihalyi, for instance, reports a study demonstrating that people acknowledged by others as being creative are more prone to experience psychological states of flow. This can be interpreted as evidence that engaging in positive psychological states is highly linked to the expression of creative behaviors, which would ultimately lead to innovation.

The relationship between innovation and positive psychology can be viewed as mutually synergistic. Positive psychology scholars might benefit from the theoretical frameworks that research on innovation has found to be involved in unleashing extraordinarily positive environments, conducive to innovative outputs. These include peculiar ways of organizing that lead to the enhancement of both positive psychological states and innovative behaviors and results. Innovation scholars, in turn, will profit from understanding how certain positive psychological processes and capabilities can help boost innovation. There is substantial research evidencing that positive psychological capabilities can powerfully explain organizational behaviors and performance outcomes, with innovation certainly being one of them.

SEE ALSO: ► Creativity ► Leadership

## Intelligence

Scott W. Sumerall<sup>a</sup> and Joseph J. Ryan<sup>b</sup>

<sup>a</sup>*Department of Veteran Affairs, Eastern Kansas Healthcare System;*

<sup>b</sup>*University of Central Missouri*

Intelligence is often viewed as an ability that lends itself to academic and career tasks. However, it is much more and one of humanity's greatest strengths. When looking at one's capacities, the intellect allows one to solve problems and cope with demands. It is necessary for psychotherapy to occur and is often only discussed among psychologists should there be a degree of decline. It may be our greatest asset, though, and one that is often minimized as a resource.

There are numerous methods of explaining and exploring intelligence. An early and influential discussion of intelligence was made by Spearman who argued that there were various components to intelligence: a general factor (g); and specific factors (s). The former involved complex tasks such as finding relationships among concepts and solving challenging problems. Tasks that required less of g were those that involved recalling learned material, speed, or motor activity. Thus, memory for information that had been read or absorbed in a classroom required less of the general factor than a novel task that necessitated finding a solution.

Cattell and Horn developed a view that there are two types of intelligence: that which is essentially nonverbal (fluid intelligence) and that which is largely culture-based and heavily influenced by education (crystallized intelligence). Pellegrino indicated that the culture in which one resides cannot be subtracted from the understanding of intelligence. It is within one's culture that problems are encountered that can be solved. If the problem is not understood because of unfamiliarity with the situation, a solution will not be easily found. Pellegrino may argue that Horn and Cattell's crystallized intelligence is merely an expression of thorough enculturation and effective functioning within that environment.

Thorndike's work suggested that three separate functions mingled to result in what is perceived as intelligence. These were the ability to deal with people, the capacity to manipulate symbols (e.g., mathematics), and the skill to manage objects. This is somewhat similar to the theory of Howard Gardner who proposed very distinct intelligences (i.e., linguistic, musical, logical, spatial, bodily-kinesthetic, intrapersonal, and interpersonal). Gardner later added naturalist, spiritual, and existential intelligences. It is clear this view is quite different from Spearman's view that there is no general intellectual skill, but a wide range of capacities that are separate. Although it can be argued these represent talents or skill sets, Gardner's theory suggests that we may each be intelligent in our own manner, regardless of the outcome of traditional intelligence testing or academic tasks.

These, and many more theorists, have attempted to define intelligence. A definition, though, may not be as relevant to the positive psychologist as a description of its usefulness. Intelligence is a vehicle through which change can occur. Whether it is psychotherapeutic in nature or one's personal understanding of their goals or place in life, intelligence can grant an awareness of the situation and what needs to be altered. Seligman referred to aspects of intelligence (as part of wisdom and knowledge) from a positive psychology framework. He listed curiosity and interest in the world and a love of learning as components. Sound judgment, an open mind, and critical analysis were also key aspects. Wisdom and knowledge were reported to entail practical intelligence, creativity, and "street smarts." Intelligence with emotions and with others and self were considered vital. Seligman listed perspective (e.g., being able to see more than an immediate single view of an issue) as the final element.

Intelligence is greatly influenced by one's environment. Therefore, enhancing experiences is vital for an individual to achieve maximum intellectual growth. Early education, exposure to reading at home, and amelioration of impoverished



environments are but a few of the potential changes that could benefit individuals. However, augmentation of intellectual development is also important for society. While intelligence is often associated with increased monetary income, it has other outcomes that are altruistic. Aiding others through healthcare, research, and education are manners of elevating quality of life while maximizing one's own capacities. An intelligent populace allows for continued growth as a culture. This is important as we shift into an information era. Allowing intelligence to go uncultivated may be detrimental to an individual, but it also has possible effects for society at large.

It should be noted, though, that intelligence is not the sole factor in determining academic, career, or personal success. Many issues impact each of those outcomes and may include motivation, peers, role models, parental guidance, teachers' influence, pedagogical style, poverty, discrimination, and other psychological strengths such as self-efficacy and hope. However, focusing on and enhancing students' strengths is a process through which increased utilization and nurturance of intelligence may occur. Lopez stated that by emphasizing students' assets as well as the positive components of students' effort and accomplishment, a significant change in the outcome of education could be attained. This may increase one's awareness of and ability to use their intelligence. As the positive psychology initiative is to enhance human functioning, the increased availability of intellectual resources and their cultivation improves not only the individual, but society at large. By being cognizant of intellectual skills, persons can utilize them to their fullest potential. Without this awareness, intellectual potential remains latent – an occurrence that diminishes us.

SEE ALSO: ► Character strengths (VIA) ► Curiosity ► Giftedness  
► Wisdom

## Intentional Self-Development

Jack J. Bauer

*University of Dayton*

*Intentional self-development* (ISD) refers to a process of personal growth in which one purposefully takes actions that are designed to shape one's self-identity and personality. ISD can also be viewed as a form of self-regulation in which people act, observe outcomes, adjust, and so on, although with a greater focus on intentionality than typically examined in self-regulation research. Central to ISD are personal goals, actions, concepts of self, and the interpretive processes through which the individual comes to generate and evaluate goals, actions, and selves. ISD is typically studied by comparing goals (notably, goals aimed toward personal growth) with measures of goal progress, self-appraisals, and personality characteristics. Ultimately the study of ISD aims to demonstrate how individuals uniquely shape the development of their own life course.

## Historical Background

Psychology's mainstream view of development is that the individual person is a personally unintended by-product of nature and nurture. In contrast, the study of ISD suggests that the individual human contributes something unique to personality development that the unintentional forces of biology and social environments cannot explain. So it might seem that psychology has little room for the notion of ISD. Paradoxically, the history of psychology is filled with great figures who have been deeply concerned with issues related to ISD. Early in developmental psychology's history, James Mark Baldwin and Jean Piaget presented models of development in which individuals actively constructed their understandings of the self and world. Outside developmental psychology, William James advanced psychological notions of free will and the subjective self. Franz Brentano championed a phenomenological understanding of psychological life that can be shown to have a direct lineage through the works of Freud, Jung, Allport, Horney, Erikson, Maslow, Rogers, Kelly, Kohut, and others. These theorists have outlined processes through which individuals consciously steer their own development by becoming familiar with various unconscious forces and mental representations of one's psychosocial life and ultimately developing a broader, deeper self-identity. The personality theorist Gordon Allport called on psychology to study the person as a whole, with special attention to self-understanding and the role of values in creating personality. Amid behaviorism's general aversion to studying intentions, Edward Tolman advanced the notion of purposive behavior, and Albert Bandura later introduced self-regulatory functions to learning theory as well as the study of self-efficacy, a key factor in ISD. Despite this longstanding interest in topics related to ISD, empirical work on ISD is perhaps most directly tied to the flourishing of research on personal goals around the 1980s.

## ISD and Self-Regulation

ISD is a form of self-regulation. ISD stands apart from most perspectives on self-regulation in three ways: the level of analysis, the emphasis on intentionality, and the emphasis on the self as a product of self-regulation.

Broadly speaking, *self-regulation* refers to the process by which individuals control and change their functioning in response to the environment. In their seminal model of self-regulation, Charles Carver and Michael Scheier frame self-regulation as a cybernetic process in which the individual compares (consciously or unconsciously) current conditions with some standard or expectancy and then makes approach or avoidance responses in order to regulate perceptions of expectancy-appraisal discrepancy. This process takes place at relatively more concrete and more abstract levels, which can be conceptualized as *micro*, *mezzo*, and *macro self-regulation*. Micro self-regulation deals with changing one's thoughts,

emotions, or behaviors in the immediate moment, e.g., changing one's present mood from bad to good. Mezzo self-regulation deals with changing patterns of behaviors or patterns of internal states in limited contexts, such as breaking an ongoing habit of smoking. Macro self-regulation deals with changing patterns of behaviors and internal states that constitute one's broader characteristics of personality or self-identity, such as trying to become a nicer person. Most research on self-regulation targets micro and mezzo self-regulation, as showcased in Roy Baumeister's and Kathleen Vohs's 2004 landmark *Handbook of Self-Regulation*. In contrast, ISD research is especially concerned with macro self-regulation, with forms of mezzo and even micro self-regulation serving the macro level. Still, some theory on self-regulation does address such hierarchies on all three levels.

ISD emphasizes the individual's intentional efforts toward development, whereas research on self-regulation more typically emphasizes appraisal processes that are largely reactive rather than visionary, consonant with the properties of a feedback system. Finally, self-regulation research typically studies internal concepts of self as *a factor* in the process of self-regulation, such as how appraisals of self-efficacy influence the course of self-regulation. While ISD research also examines self-knowledge and self-appraisals as factors in self-regulation, ISD research is especially concerned with subjective concepts of self as *a product* of self-regulatory processes. In other words, a primary phenomenon of interest is how goals and actions facilitate the development of self-understanding and broad personality characteristics.

## The Process of ISD

As outlined most notably by Jochen Brandtstadter, as well as Richard Lerner, Werner Greve, Klaus Rothermund, and Dirk Wentura, the term *intentional self-development* refers to a dynamic process of interrelated goals, actions, and self. A person makes action plans that are designed ultimately to shape one's self and personality, then takes those actions, interprets them, adjusts plans according to those interpretations, takes modified actions, and so on, adjusting one's understanding of self along the way. The subjective interpretations of goals, self, and actions are key to this process. These subjective interpretations, not objective actions, are what shape the self-regulatory adjustments in actions, goals, and self. In other words, one's goals for personal growth, major life decisions, and other intentional plans that chart the broad trajectories of a life course – thus shaping self and personality more broadly – are ultimately based on interpretations of one's own past and future. As generally understood in personality, social, and developmental psychology, the self is a subjective interpretation of one's own personality. And the self is precisely what is being intentionally developed in ISD. Finally, it is important to note that these interpretive processes take place within contexts of culture and history. For example, the range of possibilities in which individuals choose a particular career or marital condition varies greatly, depending on the values of a particular culture, and then at a particular time in history.

## The Empirical Study of ISD

Brandstadter has suggested that research on ISD focus on three related phenomena: 1) the development of cognitive representations of intentionality; 2) the development of capacities for personal control over individual development (including self-efficacy for ISD); and 3) the development of self-concepts and self-identity that serve to organize systems of personal values. Indeed the empirical study of ISD has focused largely on growth-oriented goals, their outcomes as defined by measures of self and personality, and the various action-appraisals and self-appraisals that mediate those two. Ideally, a research study of ISD is longitudinal, showing how interpretations of goals, actions, and self lead to each other over time, resulting in the intentional development of the self and personality.

Most of the longitudinal research on ISD deals with goals and goal progress, goal attainment, or goal adjustment. For example, studies by Ken Sheldon and colleagues as well as others have demonstrated that people who have personally meaningful or otherwise integrated goals are more likely to experience goal progress or goal attainment over time, which in turn predicts personality development in the form of psychosocial maturity or well-being, over the course of a semester, a year, or more. Less research has focused on a direct tie between goals and personality development over the course of years. Examples of this research involve narrative descriptions of personal goals, which allow for elaborations of people's intentions and motivations for growth. For example, Laura King and colleagues have shown that highly elaborated narratives of future possibilities predicted increases in psychosocial maturity 2 years later, whereas the personal investment in a future narrative predicted decreases in distress over 2 years. Jack Bauer and colleagues have studied narratives of major life goals, finding that growth goals aimed toward conceptual learning predicted increases in psychosocial maturity 3 years later, whereas growth goals aimed toward intrinsically meaningful concerns predicted increases in life satisfaction 3 years later – increases that were not due to personality traits like extroversion, neuroticism, or openness to experience.

Research comparing narratives of self-identity, trauma, and loss with measures of personality and adjustment over time also make contributions to the study of ISD. Robert Neimeyer and colleagues have described several ways in which people adapt to trauma and loss not by merely aiming to “get back to normal” but by reconstructing their narrative understanding of self. This tactic involves the formation of new purposes and goals in life that account for but move beyond the trauma or loss. Also, some research on posttraumatic growth has contributed to an understanding of how people intentionally use traumatic experiences as opportunities for personal development.

In another approach to ISD, particularly with respect to adult development and aging, the selection-optimization-compensation model of Paul Baltes and colleagues has provided a wealth of information on the processes under which people

choose particular goals and activities as a function of their age and environmental conditions. Most of this research does not aim to show people's intentional efforts to develop their selves and personalities, though some does. However, the model holds great promise for an age-nuanced understanding of ISD – an extremely important consideration, given this research's findings that people's goals change systematically over the adult years, such as engaging in and disengaging from particular actions. Much of this and related research focuses on approach and avoidance motivations, the individual's flexibility in choosing and adjusting goals, and the combination of conscious and unconscious processes involved in goal selection and implementation.

The research of Ravenna Helson and colleagues, as well as others, has demonstrated how particular patterns of interpreting one's life early in adulthood relate to personality decades later. For example, openness to experience, resilience, responsibility for others, optimism, and tolerance all speak to ways of interpreting the self and others that predict generally desired, prosocial development years down the road.

## **The Future of ISD Research**

With the field's increasing interest in positive psychology, research on ISD is certain to grow. Since ISD research is new, the frontiers are difficult to enumerate. Research will certainly continue to build an understanding of the qualities of and hindrances to effective goal pursuit. More research will also emerge on how people subjectively frame their personal values and draw on them to create goals. Research on folk conceptions of personality – that is, how people think about what personality is – in relation to their own, subjective understanding of self is also likely to play a role. Research on goals, motivation, narrative self-identity, personality styles and traits, social and cultural contexts, and the aging process – and various combinations of these – will also contribute. Perhaps more difficult challenges lie in the empirical definitions of intentionality itself, such as the extent to which a personal goal is something that is consciously constructed versus something that emerges from unconscious motivations and developmental forces beyond one's awareness. Other difficulties lie in studying the highly idiosyncratic, subtler processes of personal growth, such as how people intentionally use the awareness of thoughts and emotions in micro self-regulation as touchstones for macro-level ISD; how people recognize constructive versus destructive ego ideals in their ongoing self-appraisal processes en route to ISD; or how people use particular metaphors to help make concrete their subtle patterns of thinking, feeling, and relating to others. In all these directions and more, research on ISD will demonstrate if and, if so, how, individuals make unique contributions to the development of their own personalities.

SEE ALSO: ► Growth goals ► Self-regulation ► Well-being

## Intimacy

John H. Harvey  
*University of Iowa*

*Intimacy* is the quality of feeling special, cared for, validated, and understood in a close relationship, and its meaning is broader than physical closeness or sexual behavior. A close relationship involves an interdependence of lives, such that two people frequently and intensely interact with, show feelings of caring for one another, and think about one another. They show this pattern of mutual behavior over time and define themselves as close. Sexuality, which also is defined as a broad set of behaviors, is one component of intimacy. A couple may feel intimate with one another while showing only minimal sexual involvement.

It is essential that people in close relationships reciprocate the behavioral patterns characterizing intimacy. If one person directs considerable intimate behavior toward another person, but the latter does not reciprocate, the relationship is not intimate. In fact, nonreciprocated intimate behavior may constitute the basis of an unrequited love. Unrequited relationships sometimes emerge when one partner falls "out of love" with the other. They also may evolve when one person has a "crush" on another, but the other person does not return the overtures of desire.

## Self-Disclosure and Social Penetration

How do people show one another that they are being intimate? A key behavior that contributes to intimacy is that of self-disclosure. Reis and Shaver suggest that intimacy is created by the process of escalating reciprocity of self-disclosure in which each person feels his or her innermost self validated, understood, and cared for by the other. In particular, emotional disclosures of histories, events, thoughts and feelings are vital to feeling that a relationship is authentically intimate. For example, in a relationship in which intimacy is emerging, a woman may share with a man a previous history of family abuse. In turn, the man may describe events in his life that represented great personal failure and that led him to feel low esteem in certain contemporary situations. The reactions of one's partner are critical if the discloser is to feel comfortable in these acts of self-disclosure. In the illustration above, to maintain intimacy, both the man and the woman would show empathy for the other and would ask questions that would help understand the feelings of loss and hurt that resulted from the events disclosed.

Altman and Taylor developed a theory entitled *social penetration*, which builds on the idea of how self-disclosure is vital to close relationships. According to this theory, people "penetrate" others via learning about them, first observing the more superficial qualities (the clothing they wear); then later, if the relationship progresses, observations of deeper qualities such as their darkest secrets and their greatest embarrassments, hopes, and fears occur. A major prediction of social

penetration theory is that the greater the disclosure, the greater people like one another. In general, women tend to disclose more than do men. Presumably, we are attracted to people who disclose to us because such disclosure suggests the desire to be intimate.

While self-disclosure is a behavioral component of the social penetration process, this process may include any behavior that is interpersonal – verbal (e.g., self-disclosure), nonverbal (e.g., the intonation of voice, smirks, frowns, smiling, handshakes, hugs, kissing), or environmental (e.g., moving close to one another in a night club setting) – that affects relationship development.

Social penetration theory predicts that at the first stage of relationship development, there is a distinctive “wedge shaped pattern” to disclosure associated with greater disclosure at superficial than intimate levels. Then, there is a gradual increase in disclosure from superficial to intimate levels of exchange as a relationship develops. Ultimately, there is a slowing down of self-disclosure (in the manner of a negatively accelerated curve) as it moves into more intimate topic areas. Although self-disclosure is predicted to be generally linear as a relationship develops, there are certain topics that may be identified unilaterally or mutually as off limits to talk about, including family secrets and highly personal or taboo topics such as previous sexual indiscretions.

Taylor studied how self-disclosure progresses during the early stages of a relationship. College students, who were originally strangers, were assigned as dormitory roommates at the beginning of an academic semester. They were administered self-disclosure questionnaires several times during the semester to measure how much information the roommates had shared with one another. Results indicated that breadth of disclosure (e.g., talking about many issues such as school work, close relationships, and family matters) at various levels of intimacy increased over the semester for the roommates. Breadth of disclosure also occurred at a higher level and at a faster rate for superficial than for more intimate topics, supporting the notion that people may be cautious in revealing personal information at the beginning of a relationship.

## **Intimacy Process Model**

Reis and Patrick developed an intimacy process model, which predicts that emotional disclosures (revealing feelings and opinions) have more impact than descriptive disclosures (revealing facts and information about oneself) in enhancing the sense of intimacy in social interaction. Emotional (or evaluative) disclosures are considered to represent the core aspects of the self and reflect individuals’ desires to have an authentic and/or honest relationship with another person. Reactions by a listener to these emotional (as opposed to descriptive) disclosures have been found to influence (among college students and married couples keeping a diary of their social interactions) how much the discloser feels understood, validated, and cared for and, in turn, if the conversation is perceived to be intimate.

Research by Gore, Cross, and Morris is relevant to the intimacy process model. This work documents how individual differences in a personality variable (relational self-construal) influences (via self-disclosure) perceptions of responsiveness in interactions and in the development of intimate relationships. The Relational Interdependent Self-Construal Scale used by these researchers taps differences in the extent to which people define themselves in terms of relationships. Persons who are high in relational self-construal identify themselves in terms of being connected with others, especially in valuing the development and maintenance of close relationships. Typical items on the relational self-construal scale include: "My close relationships are an important reflection of who I am" and "When I establish a close friendship with someone, I usually develop a strong sense of identification with that person." Someone scoring high, compared to low, in relational self-construal is perceived by new acquaintances as more disclosing and as being especially caring and responsive to their partner's concerns.

A recent longitudinal study among previously unacquainted dormitory roommates documents how self-disclosure by persons high in relational self-construal may accelerate relationship development. At the first measurement point, it was found that people who were high, compared to low in relational self-construal were likely to engage in emotional disclosure to their new roommate at the beginning of the academic semester. Higher emotional disclosure predicted higher perceptions of responsiveness (e.g., "My roommate seems sensitive to my feelings") by the disclosure recipient that in turn predicted the recipient's perception of a higher quality relationship (based on measures of relationship strength, commitment, depth, liking, closeness, and conflict) and the recipient's own higher emotional disclosure.

After one month had elapsed in the roommates' relationship, it was found that the disclosure of the recipient's own emotional disclosure at Time 1 was associated with the initial discloser's perceptions of their partner's responsiveness at Time 2, predicting in turn the initial discloser's perceptions of the quality of the relationship at Time 2 as well as the initial discloser's own emotion disclosure at Time 2. These findings are important in documenting the role of self-disclosure and responsiveness at the beginning of a relationship, and also represent critically-needed longitudinal work on the topics of self-disclosure and intimacy.

## **Minding and Intimacy**

Harvey and Omarzu developed a very broad conception of how people become extremely close and special to one another referred to as *minding* the close relationship, (using the gerund "minding" to reflect the constant ongoing process of thinking about and acting toward one's partner in ways designed to enhance the relationship). Minding is defined as a never-ending reciprocal knowing process involving a complex package of interrelated thoughts, feelings, and behaviors that represents an essential condition for creating and sustaining closeness in mutually-satisfying



relationships. Minding involves the following components: 1) Behaviors aimed at knowing the other, which include self-disclosure on the part of one and listening, observing, and questioning on the part of other. 2) Attributions (in general meaning interpretations of why people do what they do and of why events occur) about and perceptions of a partner's qualities and predispositions to behave in certain ways, and attributions about outcomes that denote or connote a relationship-oriented, caring foundation for the partner's acts. 3) Acceptance of and respect for what is learned via the knowing and self-disclosing processes. 4) Reciprocity in thoughts, feelings, and behaviors between partners. 5) A final criterion of well-minded relationships is that the minding process must never end and will not be established until a substantial period of time has passed involving the process outlined here. Once established, a well-minded relationship will be ongoing at some level continuously, whether carried out consciously or in a more scripted way.

Minding theory suggests that all of the components listed above are essential to intimacy and closeness. According to this theory, there are well-minded relationships (i.e., those involving adherence to the components listed above) versus not well-minded relationships. Self-disclosure is a principal element in the first set of behaviors: a person's acts of trying to know a partner, and in turn, the acts of letting a partner know the person.

In a well-minded relationship, the act of soliciting self-disclosures from one's partner will be done with care in consideration of the new relationship meanings and implications for interaction that may emerge from such disclosure. Further, the solicitation of disclosure from a partner will be timely in terms of the partner's willingness and interest to engage in such behavior. These calculations by the soliciting party are no small matter since they may touch on areas that cause anxiety or embarrassment to a partner. In close relationships, people make such calculations quickly. In well-minded relationships, people often will have learned how to carry out these calculations and others pertinent to the meaning and merit of such activities for the relationship while in the stream of interaction. Minding also emphasizes the interaction of partners questing for and sharing information about each other, as opposed to an emphasis upon the need for self-revelation. Self-disclosure by one partner is encouraged, even induced, by acts of minding on the part of the other.

The other components of minding are similarly important in the development of intimacy. For example, in a close relationship, it is important to accept and respect what one discovers via self-disclosure. People may not necessarily like all that they discover, but all of the details are part of the bigger picture of who one's partner is and what the relationship is. Many qualities of other must be accepted because they are inherent to other's being and cannot be readily changed. As important, the act of making attributions about other is a delicate step in the achievement of intimacy. Couples need to be fair in their causal analyses of events (e.g., Why did this fight start? Why is my partner acting so hurt?) and work toward better communication of one's understandings of events and how to rectify problematic patterns. Finally, nothing is more critical than continuity in the care and tending

of closeness. A close, intimate relationship is one that must be nurtured daily, and if it is not nurtured in this ongoing, never-ending way, it can quickly be lost.

## Future Directions

As is true with the minding concept, intimacy is a multilayered concept that is difficult to study all at one time. Prager (1995) makes this point in her analysis of the complex nature of intimacy. She differentiates intimate interactions (e.g., communicative exchanges), and intimate relationships in which people have a history and anticipated future of intimate interaction. Although she offers many possibilities for the various components of intimacy, she argues “intimacy [is] a superordinate concept and . . . , as a concept, cannot be defined precisely enough for research purposes. Rather, basic intimacy concepts, within a clearly delineated superordinate structure, can be defined with more precision and are therefore more likely to be serviceable for the study of intimacy” (p. 26).

Even with this limitation, scholars have produced a rich literature detailing in a more limited way the operation of key aspects of intimacy such as self-disclosure. The longitudinal study by Gore and colleagues on personality variables and self-disclosure shows the value of research focusing on these aspects of intimacy in ongoing relationships over an extended period of time.

Research also is needed to: 1) explore intimacy over time in older couples, since most contemporary work has been directed at couples in their twenties; 2) examine how past relationships affect future relationships in terms of intimacy; and 3) study how young children learn about intimacy.

Finally, a timely area for future work concerns the integration of different systems of analysis that relate to intimacy. For example, work by evolutionists suggests that heterosexual intimate exchanges are governed by age-old evolutionary tendencies, such as males’ quest for multiple sexual partners and females’ quest for one partner who will help with child-raising. This type of analysis needs to be integrated with psychological analyses such as the intimacy process model and minding to better depict how evolution, biology, learning, and culture affect the development of intimacy.

SEE ALSO: ► Close relationships ► Honesty ► Romantic love

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## Intuition

Barbara Kerr

*University of Kansas*

Intuition refers to a single instance of an instant insight, or to the process of immediate or rapid cognition without apparent rational thought. Intuition can be described in terms of its role in philosophy and religion; in judgment and decision-making; and in social relationships. Psychological experiments have illuminated the process of intuition in nursing, sports, games, couple's conversations, and economic decisions, among many other human activities. Neuroscience has revealed how intuition works at a neurochemical and neurobiological level. Positive psychologists consider intuition a strength that can be identified and honed.

Among indigenous people around the world, intuition is considered the primary means of knowing. Those members of an indigenous community who seem to have greatest access to intuitive insights are considered to be most in contact with the spirit world. They are honored as shamans, healers, seers and ceremonial leaders. Children are encouraged from a young age in most indigenous cultures to be attentive to intuitive feelings, spontaneous imagery, and immediate insights. In these cultures, to be guided by intuition as one goes about one's tasks and relationships is to be in harmony. This is not to say that there are no rules or customs to be obeyed (in fact, there may be many); but rather, that inner knowing is considered to be superior to rational analysis.

Intuition is also given primacy in the majority of Asian cultures, particularly in the Buddhist traditions that culminated in the rise of Zen. Buddhist practices encourage freeing the mind from endless verbalization of wants, needs, and fears that fill most of consciousness. When this verbalization is stilled and calm attained, it is considered possible to intuit wordless truths and enter the pure state of consciousness that is enlightenment. Whereas most Asian traditions involve physical activity such as yoga or martial arts, mindfulness exercises, or meditation, Zen elevated intuition to the major means of teaching and learning. Zen Buddhism is considered to be a special transmission of knowledge outside of the scriptures, when enlightenment leaps from mind to mind. The koan is the major tool of Zen instruction. It is a riddle that cannot be solved by rational thinking; in fact, most koans frustrate rational thinking to the breaking point. Koans are only solved in a moment of blinding insight, an experience of "aha!"

Intuition, once believed to emanate from the spirit world, gods, or God, was seen as beyond the realm of human investigation. In the last century, however, scholars began to consider its role in philosophy and religion; in the psychology

of the individual; in the study of judgment and decision-making; and in the neurobiology of cognition and consciousness.

Only in Western cultures is the use of intuition in the attainment of knowledge considered inferior to rational methods. The Greek philosophers attempted to mend the flawed thinking that sometimes arose from intuition with logic and analysis, and showed the superiority of reason to intuition in solving many of the riddles of nature and mathematics. Reason was even applied by Aristotle to aesthetics and ethics, as he developed rules by which to evaluate comedy and tragedy, or virtuous action. Although early Christianity was rife with mystics seeking their own visions of heavenly life through intuitive contemplation, the major discourse of the Church during the medieval period was reasoning based on scripture that eventually devolved into scholasticism, a movement characterized as discussions of "how many angels can dance on the head of a pin." Nevertheless, powerful personalities such as Joan of Arc and Hildegard of Bingen were able to promote their intuitions of the nature and desires of God. Joan of Arc, upon being questioned by the Inquisitor, Robert de Beaudricourt, about the voices, said, "You must not speak to me about my voices. They come from God." Robert exclaimed, "They come from your imagination!" To which she replied, "Of course. That is how God speaks to us."

The Renaissance saw the rise of rationalism, even though Cartesian thought, the foundation of the Age of Reason, began with an intuition: I think, therefore, I am. Science asserted the primacy of skepticism, observation, quantification, and analysis over intuitive insight, and that methodology has held sway over the science of psychology. The behaviorism that dominated psychology in the United States held the study of intuition to be suspect, because intuition took place in the "black box" of the mind, which, being unobservable, was considered to be beyond the realm of science. In Europe, however, the advent of Freudian thought and the growth of the many schools of psychoanalysis uncovered the role of the unconscious in the motivation of human behavior. Sigmund Freud's goal was to render the contents of the unconscious into consciousness, thereby making previously unacceptable, unknown impulses available for analysis and change. Carl Jung, however, differed from Freud in proposing that the unconscious had treasures that could not be discovered or understood by rational or scientific means. Rather, Jung said, intuition must play a key role in unlocking the secrets of the unconscious, and intuition allowed the emergence of symbols that represented the collective unconscious, or the storehouse of inner knowledge possessed by all human beings. Jungians considered the intuitive temperament to be complement of the sensing temperament. A sensing temperament indicates that a person is more likely to attend to what is going on outside of himself or herself; an intuitive temperament means that the person is more likely to attend to what is going on inside himself. Jung believed that those with intuition listened to an "inner voice." Sensing people are interested in what they can observe, taste, touch, feel, hear, and smell, and in what the external world has to teach them about the present situation. Intuitive people are interested in the promptings within, in the feelings,

images, symbols, and intentions they experience, and in ways of discovering the nature of their own internal world. Paradoxically, but going inward, intuitive people discover a connection to others in the universal, collective unconscious.

Although little attention was paid to intuition in science, the Jungian ideas about intuition were attractive to educators, business people, and helping professionals, who made the Myers-Brigg Type Indicator, a personality instrument that incorporated the Sensing-Intuitive dimension, one of the most popular tools of human relations training.

A rebirth of the study of intuition seems to have been prompted by innovations in two fields of study: economic decision-making and neuroscience. Daniel Kahneman, who won the Nobel prize in 2002, describes the way that people actually make judgments and how this affects economic decision-making. What he learned was that people rely, for the most part, on intuition for decision-making, because it is accessible and quick. Compared to long computations required by rational thought applied to economic decisions, intuitive judgments based on small amounts of information rapidly formed into a pattern are likely to be preferred. In many cases, intuitive judgments are flawed because patterns are perceived where there are none – what is called a Type I error in judgment. Nevertheless, when people are highly expert in a domain, intuitions can seem like extrasensory perception. Psychologist Gary Klein studied how firefighters in emergency decisions make snap decisions based on intuition; he found that longer experience of firefighting was associated with rapid, accurate intuitions. People with an extraordinary grasp of any domain are less likely to make the Type II error in judgment – not seeing a pattern when it actually exists. Psychological experiments have illuminated the process of intuition in nursing, sports, games, and even couple's conversations, among many other human activities. For example, after a lifetime of observing, analyzing, and categorizing couple's interactions, John Gottman is able to predict with amazing accuracy the probability of a marriage succeeding or failing.

Neuroscience has also brought about great advances in the understanding of intuition, as the "black box" of the mind has been opened by fMRI (functional magnetic resonance imaging) of the brain at work on a problem. These studies, pioneered by Antonio Damasio and Matthew Lieberman reveal how intuition works at a neurochemical and neurobiological level. Most neuroscientists now agree that there seem to be two interlocking systems. Kahneman calls the intuitive mode of processing *System 1* and the rational mode of processing *System 2*. *System 1* operations tend to be habitual, implicit, associative, heuristic, and often emotionally charged. *System 2* operations seem to be deliberate, explicit, deterministic, systematic, and unemotional. Although *System 1* is more susceptible to biases, this intuitive mode is more rapid, and can suffice for most of one's daily decisions.

Epstein labels these same systems the experiential and the rational. The experiential encodes information in images and metaphors that are processed unconsciously, so that the results seem self-evident and certain. The rational system

encodes information in the form of abstract symbols, words, and numbers, and the processing is conscious and open to consideration of evidence and disconfirmation.

Lieberman calls them system C that is the computing, reasoning, conscious mind; the X system, which is the rapid, holistic, unconscious mind. Lieberman's theory is directly based on brain imaging studies that have revealed that the x-system is governed by the functions of the amygdala, basal ganglia, and the lateral temporal cortex; structures implicated in automatic mental processes. The c-system is governed by the functions of the anterior cingulate, prefrontal cortex, and the medial temporal lobe, where processing is conscious and deliberate.

Despite differences in labeling, and some differences in explanation of neural bases of particular processes, all of these theorists agree that the brain toggles back and forth between the two systems; that the intuitive system seems evolutionarily to have developed earlier; and that, although many of the functions of the rational mind are associated with the left hemisphere, and many of the functions of the intuitive mind with the right hemisphere, they are by no means separate systems.

Positive psychologists consider intuition a strength that can be identified and honed. Daniel Goleman has reframed the kind of interpersonal intuition that permits empathy, deep connection, and the capacity to manage interpersonal relationships as social intelligence. It is this kind of intuition that can be shaped in the training of counselors, psychologists, and other helpers. Some methods for training intuition rely on teaching all the subtle, visible cues of facial features or gesture; other methods concentrate on the verbal skills that permit helpers to form a strong bond with others. Other methods are more experiential, and use visualization, meditative states, and metaphor to access and build intuitive skills.

Positive psychology has opened up many new areas of human behavior to research that were previously considered beyond the reach of science. Intuition, once scorned by scientists as a fuzzy construct of little utility, and seen by many practitioners as an irrational mental process that could be overcome by rational training, has now been restored by neuroscience and positive psychology to the position of importance it has held for millennia in the non-Western world.

SEE ALSO: ► Buddhism ► Consciousness ► Functional MRI

► Indigenous positive psychology ► Kahnemann, Daniel ► Neurobiology

# J

## James, William

James O. Pawelski  
*University of Pennsylvania*

William James (1842–1910) is widely regarded as one of the fathers of psychology and the first great American psychologist. A founder of American pragmatism (a school of philosophy that emphasizes the importance of practical consequences for both meaning and truth), he was also one of the most important philosophers of his day. He taught physiology, psychology, and philosophy at Harvard University in a professorial career that lasted some 35 years. During this time he also served as president of both the American Psychological Association and the American Philosophical Association. The older brother of the novelist Henry James, William was a gifted writer, lecturer, and teacher, who numbered among his students the likes of Theodore Roosevelt and Gertrude Stein.

In 1890, James published the two-volume *Principles of Psychology*, which has had a profound influence on the development of psychology and which some still consider to be the best introduction to the field. James's own abridged version of this work became the standard text in undergraduate psychology courses in the United States for the next forty years.

Throughout his writings, James emphasizes the importance of individual subjective experience, its scientific study, and its cultivation and improvement. Important themes in the *Principles of Psychology* include the will, attention, and habit. Although James did not believe the question of free will could be decided on purely psychological grounds, he was a strong defender of free will on moral grounds. He believed that through mental effort we can attend to certain thoughts instead of others, thus influencing our beliefs and actions, and through them our habits and character.

James's *Varieties of Religious Experience* was a founding document in the psychology of religion. In this work, James (1902/1985) examined "healthy-mindedness," which he defined as "the tendency which looks on all things and sees that they are good" (p. 78). While he was critical of certain shallow or extreme forms of healthy-mindedness, he defended this perspective of life on the grounds that it led to a large number of positive physical and psychological results for many of those who adopted it.

In his presidential address to the American Philosophical Association, James lamented that healthy-mindedness had not been scientifically studied. He called for the founding of a new branch of psychology that would make a rigorous study of human functioning at its best. Of particular interest to James were experiences (e.g., religious conversions), practices (e.g., yoga), events (e.g., battles), and ideals (e.g., liberty) that could unlock new and deeper levels of energy in individuals. He called for the systematic study of these various levels of energy and the means by which they can be accessed.

James believed that we have a great deal of control over our thoughts and actions, and that through them we can regulate our emotions, select adaptive beliefs, shape our environment, and help make the world a better place. He believed that we could regulate our emotions through action. When we do not feel cheerful, we can simply act as if we are. This action tends to bring the positive emotions we were lacking. He also believed that we can use our wills to select beliefs that in turn affect our external reality. There are times, James (1897/1979) argued, where "faith in a fact can help create the fact" (p. 29).

James was a passionate defender of meliorism, the doctrine that the world can be improved through human effort. As a psychologist and public philosopher, he raised his voice in support of education, tolerance, freedom, and justice. His thought has directly influenced the content of Alcoholics Anonymous programs as well as the founding of the Peace Corps and the development of service learning approaches in education.

SEE ALSO: ► Freedom ► Justice ► Religiousness ► Mental health

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## **Job Satisfaction**

Kirsten J. Wells

*University of Kansas*

Job satisfaction stems from an individual's perception of fit between him- or herself and his or her job. It is believed to manifest in two different ways, as a general overall attitude and positive feelings and more facet-specific satisfaction that results from intrinsic and extrinsic factors. Intrinsic factors are embedded in the job itself and include items such as the use of one's skills, autonomy, or work that aligns with one's values. Extrinsic factors consist of outside motivators such as pay and job security. These factors along with others such as opportunities for promotion, supervision, work conditions, coworkers, and the work itself account for a large amount of variability in job satisfaction.

Job satisfaction has traditionally been of great interest to the field of industrial-organizational psychology as employers have looked for ways to increase productivity. In recent years job satisfaction has gained interest from positive psychologists as they search to understand well-being and happiness and the impact of vocation on these constructs.

The desire for increased productivity has tied job satisfaction to job performance as far back as the 1930s. Two of the most common theories have revolved around whether job satisfaction increases job performance or whether job performance drives job satisfaction. Another common theory states that the relationship between job satisfaction and performance is affected by other factors (such as employee participation, pressure for performance, self-esteem, need for achievement) and rewards (such as pay increases and bonuses) given to the employee and how the employee views these rewards.

The first view, that job satisfaction causes increased job performance, is generally acknowledged as the oldest of the theories on this relationship and is commonly traced back to the human relations movement. While many people hold the belief that employees who are happy with their job are more productive research has not supported this idea. Two major reviews of numerous studies on this subject found low correlations between job satisfaction and job performance.

Lawler and Porter suggested that the relationship between job satisfaction and performance is the reverse of the first theory. They concluded that higher performance leads to rewards which in turn lead to increased satisfaction. This theory derives from the behavioral models in which the behavior (job performance) will lead to outcomes that are satisfying to the individual.

The third view, known as the moderator approach, posits that job satisfaction and performance are related under certain conditions and are not unidirectional, but may be bidirectional or circular in relationship. The belief is that there are a large variety of moderating factors such as cognitive abilities, need for achievement, and a myriad of others that impact the relationship.

Despite the large amount of attention this topic has received, the relationship between job satisfaction and job performance is still unclear. In recent years there has been a call for more thorough research on the validity of the various theories proposed to date.

While a major focus of job satisfaction has been on the link to job performance, a shift has been seen in recent research to its impact on well-being. It is estimated that a working adult spends one quarter to one third of his or her waking hours at work. Because of this, work-life balance has become the mantra for employees and the relationship between life satisfaction and job satisfaction has become a focus of research.

In a study of the relationship between job satisfaction and life satisfaction Judge and Watanabe found that while there is mutual influence in both directions, people's well-being has been found to have a greater impact on their level of job satisfaction. A meta-analysis of 34 studies by Tait, Padgett, and Baldwin also found an average correlation of .44 between job satisfaction and life satisfaction.

Judge's Core Self-Evaluations Model has recently proposed shifting the factors of job satisfaction from extrinsic factors to factors of individuals' dispositions, specifically self-esteem, self-efficacy, locus of control, and neuroticism. Results suggest that these four factors are significant predictors of both job satisfaction and job performance.

Measuring job satisfaction is often done using a Likert scale by which an individual rates their level of job satisfaction. For example, "how satisfied are you with your job?" utilizing a scale of one to five, with one being *very dissatisfied* and five being *very satisfied*. Other measures include the Minnesota Satisfaction Questionnaire, the Job in General Index, and the Job Descriptive Index, all of which ask multiple questions regarding job satisfaction and contributing factors and tend to produce more reliable estimates.

SEE ALSO: ► Life satisfaction ► Positive affectivity

## Joy

Brent Dean Robbins

*Daemen College*

Joy is a pleasant and often quite intense emotion which usually occurs within a safe and secure environment and is experienced bodily as a warm glow which emerges from the center of the body and moves upward and outward. The expansive feeling of joy is accompanied by a corresponding broadening of perception, a powerful sense of connection to others, a profound feeling of being rooted in the present moment, a sense of existential freedom, and/or the belief that the world is nurturing, life-affirming, and benevolent.

Joy must be distinguished from the construct of *subjective well-being* (SWB). Both joy and SWB are commonly referred to as *happiness*, because both constructs

share the quality of having a positive emotional valence. In other words, each term refers to a state of mind that is pleasant rather than unpleasant. More specifically, however, SWB is uniquely concerned with the measurement of a person's assessment of his or her satisfaction with life and, in addition, the frequency of his or her positive and negative emotions over time. A person with high SWB would be a person who is very satisfied with his or her life and who generally has much more positive than negative emotions. While it is possible to designate such a trait joy, the term joy is more commonly and more appropriately used to describe a momentary or relatively fleeting state of pleasant emotion. Therefore, it is possible for a person to experience intense feelings of joy quite often, but because he or she also experiences intense negative emotions, to score relatively low on a measure of SWB.

Dimensional approaches to emotion identify joy as having the characteristics of positive valence and high arousal. Joy and SWB share the characteristic of having a positive valence, however the construct of SWB does not imply any particular level of arousal, neither in the short term nor over an extended period of time. By way of comparison, a relaxed state is also characterized by positive valence, but possesses a low state of arousal. On the dimension of valence, joy and relaxation can be further distinguished from negatively valenced emotions such as depression and fear, which can be discriminated from each other by their respective low and high states of arousal.

Theoreticians who consider emotions to be discrete rather than dimensional have identified joy to be one of the *basic* emotions. Basic emotions are those emotional states that are considered to be primary because they tend to be universal within the species, likely evolved to serve particular survival functions and have been found to appear very early in development. In addition, the basic emotions usually elicit a set of species-typical behavioral patterns (e.g., facial expressions) that can be universally identified and are not easily modified by learning, history and social context.

The expression of joy appears early in human development. Social smiles appear as early as the first month of life. Over time, these expressions of joy are displayed with increasing frequency through engagement with others, especially caregivers. When observed in the context of its development, at least one adaptive function of joy is to communicate to parents and to get their attention. This seems to work very well because parents and observers are naturally drawn toward a joyful child, just as we are attracted to joyous peers and partners. Young children are also found to commonly express joy in response to the mastery of various skills, which may be the outer communication of an inner pleasure that functions to reinforce the achievement of personal goals.

Aksan and Kochanska systematically observed infants in social and nonsocial contexts that tend to elicit joy. They observed the babies playing peek-a-boo with mother, father and a stranger, and then observed them watching puppets, listening to music, and playing with various toys. These episodes were videotaped and later coded in order to quantify the data (e.g., presence or absence of smiling,

etc.). The researchers performed various factor analyses and found that, while a one-factor solution fit the data well, a two-factor solution was a better fit. The two-factor solution differentiated observed behaviors in social versus nonsocial episodes of joy. These findings suggest that joy, at least in infants, may be understood to have different subcategories of expression, one which functions for the purpose of adaptive social reasons and another which operates under nonsocial conditions, perhaps functioning to create intrinsic enjoyment of mastery during play.

As noted, the early developmental emergence of an emotion has been suggested to be an indicator that the emotion is basic or discrete. The developmental research supports the hypothesis that joy is a basic or discrete emotion. This notion is further supported by evidence of the universality of the behavioral expression of joy. Over the last several decades, one of the most important methodological advances in emotion research has been the systematic study of facial expressions of emotions using a standardized coding system. In both Westernized and non-Westernized cultures, six facial expressions have been found to be universally recognized, and these include: anger, disgust, fear, sadness, surprise, and joy. In honor of a pioneer in the research of the facial expression of emotion, Guillaume Duchenne, the expression of a genuine or involuntary smile is commonly referred to as a *Duchenne smile*. This type of smile is characterized by the mobilization of the *sygomaticus major* and *orbicularis oculi* muscles around the mouth and eyes. A voluntary smile, of the type that one might find on the face of an American working at a sales counter in a retail store, is sometimes called the *Pan American smile* or a *professional smile*, and does not involve the *orbicularis oculi* muscles around the eyes, only the *sygomaticus major* muscles of the mouth. By carefully observing the eyes of a person who is smiling, it is therefore possible to clearly distinguish sincere smiles from those that are put on voluntarily.

Robbins performed a qualitative study to investigate the experiential meaning of joy. The empirical, phenomenological method was used to identify common themes that emerge across first-person, narrative descriptions of joy. To help enrich these descriptions, the researcher used psychotherapeutic techniques, including abstract drawings and psychodrama, to help participants vividly and explicitly express the fine details of their experiences. For each of the participants, the experience of joy began with a feeling of awe or wonder – a sense that something or someone in the world, or the world in general, was powerful and greater than the self. This finding may reflect an association between joy and a feeling of appreciation or gratitude, which is suggested by past research that links appreciation to subjective well-being. Participants also described a context in which they felt at peace, tranquil, and secure. This finding is consistent with the observations of other researchers who have identified joy as requiring situations that are safe, familiar and relatively stress free.

Participants also described joy as emerging from a felt, embodied sense of being centered or balanced. The feeling itself was consistently described as a warm, powerful, energized feeling that moved up and outward within the body toward

the world. The consequence of this feeling was a sense of an expansive, expanding self complimented by a perception of a world that correspondingly mushroomed out and opened up for the participants. A sense of this expansiveness is illustrated, for example, in the film *The Sound of Music* (Wise, 1965), when the character Maria is depicted running playfully atop a mountain. Through a wide, expanding lens, the camera captures her as she sings, "The hills are alive with the sound of music." A similar quality of expansiveness has been identified in the feeling of *elevation*, which is the feeling of inspiration upon witnessing the good deeds of others. Joy and elevation share an acute sense of expanding warmth in the chest and upper torso of the body.

Whether in the presence of others or not, participants described the feeling of joy as an experience that made them feel more connected to, closer to, or intimate with others. The social function of joy may help explain why people with high scores on measures of well-being tend also to be extroverted. Those people who are more socially motivated may be more compelled to express positive moods in order to initiate and sustain engagement with other people.

Participants who described their experiences of joy were consistent in their insistence that their feeling of joy was not a consequence of achieving an instrumental aim. Rather than being motivated to pursue some extrinsic aim or goal, participants found themselves to be completely present in the moment, absorbed in their respective activities. This noninstrumental quality of joy seems at first glance to contradict the notion that joy also serves certain adaptive functions, such as the facilitation of social relationships. However, as noted by Fredrickson's broaden and build model of positive emotions, positive emotions such as joy did evolve to serve adaptive functions. Nevertheless, an emotion can be biologically adaptive, from an evolutionary perspective, and still not have an immediate, instrumental aim. These kinds of noninstrumental states of mind are commonly found in the kinds of behaviors we understand to be play. Yet, these very experiences of play do nevertheless, and in the long run, serve adaptive functions by helping the organism to develop a wider repertoire of physical, intellectual and social resources.

The noninstrumental quality of joy overlaps with descriptions of the experience of *flow*. Flow has been described as having an *autotelic* character; that is, flow seems to be experienced as an end in itself rather than a means to some extrinsic end. Like flow, the experience of joy itself seems to serve as its own goal or purpose. At the same time, paradoxically, participants were also adamant that they had not been striving in any way to experience the feeling of joy; on the contrary, the experience of joy came over the participants at a time they were least expecting it, indeed overwhelming them at the time because they did not expect to experience such an intense feeling. In a poem, William Blake (1994) also described this strange quality of joy: "He who bends to himself a Joy/ Doth the winged life destroy;/ But he who kisses the Joy as it flies/ Lives in Eternity's sunrise" (p. 143). Upon at least one interpretation of this poem, joy has an elusive quality about it, so that when the emotion is made to be an extrinsic goal, the experience

ironically becomes less accessible than if one were to instead take the present moment as its own intrinsic end. Giving up on joy as an extrinsic end may open the door to the kind of autotelic state of mind that permits joy to flourish.

As already implied in the descriptions above, and similar to other emotional experiences, joy was described by participants as producing an altered perception of time. Participants felt completely free to become profoundly absorbed in the present, and had no obligation to attend either to the past or the future. Within this present moment, the world was perceived to be undifferentially benevolent. These participant observations concord with philosopher Quentin Smith's (1986) conception of joy, in which one is able to "live in the present and appreciate the present as a fullness in itself" (p. 152). The feeling of vitality was so powerful and overwhelming, the participants lamented they did not experience this feeling more often. In addition, the feeling was identified to have youthful qualities of vibrancy, growth, and innocence.

A factor analytic study of joy distinguished joy from the similar emotions of elation and gladness. What discriminated joy was its tendency to occur in connections between people and in its function to affirm the meaningfulness of life. Consistent with Robbins' findings, the study also found that joy was less goal-centered than elation and gladness. Elation resulted when participants were surprised to obtain a desired, fantasized goal, whereas gladness was demarcated as a consequence of the achievement of a goal the individual expected to meet.

More recent research has suggested joy should be set apart from the similar emotion of interest. The authors suggest that interest functions to facilitate learning and tends to cultivate greater feelings of tension. Joy operates in the opposite direction, toward the reduction of stress. Furthermore, while joy tends to occur in contexts that are safe and familiar, interest tends to be elicited by the novel and strange. Research in neuroscience seems to support these observations. For example, Panksepp classified play or joy separately from exploration or interest, and found that the ingestion of stimulants had opposite effects on joy and interest – while stimulant medication increased exploratory behavior, and by implication interest, the playful activities of joy were found to be reduced in frequency.

In a study of senior citizens, Consedine and colleagues found that joy was positively related to religion and reduced morbidity and stress, whereas interest was linked to higher education and greater feelings of stress. The religio-spiritual themes of joy have also been identified in qualitative research of joy. Many of the qualities of joy – including the sense of awe, the personification of the world as if it were a benevolent power, the feeling of transcendence, the dissolution of the ego, the intense present-centeredness of the experience, and various other aspects of the emotion – have clear parallels in descriptions of religio-spiritual experience, as well as those qualities of experience identified by Maslow as peak experiences.

SEE ALSO: ► Appreciation ► Awe ► Elevation ► Flow ► Well-being

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## Jung, Carl

Paul T. P. Wong  
*Tyndale University College*

Carl Gustav Jung (1875–1961) was a Swiss psychiatrist and founder of analytical psychology. His influence continues to grow in many areas, such as psychological types, dream work, play therapy, and the role of spirituality and religion.

## The Importance of Meaning

The positive psychology of Viktor Frankl and Jung can be classified as depth positive psychology, because both of them emphasize the need to integrate the unconscious realm. Both can be considered fathers of contemporary positive psychology because of their focus on the innate human potential for growth through meaning and spirituality.

Graber (2004) wrote about Carl Jung: “He, like Frankl, saw the therapeutic possibilities of the human spirit – that is their strongest theoretic possibilities of the human spirit – that is their strong theoretic link” (p. 179). Thomas Peterson correctly pointed out that both Frankl and Jung emphasized the connection between meaning systems and mental health.

Jung (1933) stated:

A psycho-neurosis must be understood as the suffering of a human being who has not discovered what life means for him. . . . The patient is looking for something that will take possession of him and give meaning and form to the confusion of his neurotic mind. (p. 225)

Like Frankl, Jung (1964) also recognized the value of meaning in suffering: “Man can stand the most incredible hardships when he is convinced that they make sense” (p. 76).

## The Duality of Human Nature

Probably influenced by Eastern philosophies and religions, Jung adopted a dualistic framework of psychology. Jung (1933) recognized that duality is the fact of human nature: “Every good quality has its bad side, and nothing that is good can come into the world without directly producing a corresponding evil. This is a painful fact.” (p. 199). One example of this duality is that we cannot achieve wholeness without integrating the dark side of the self.

The archetype of the *self* represents the center of the psyche and is commonly expressed by the symbol of a Mandala. The self signifies wholeness, the product of integrating the consciousness and unconscious aspects of the psyche through individuation. One cannot actualize selfhood without getting in touch with the *shadow*, the archetype of the dark and rejected parts of the self.

The shadow contains the libido, forbidden feelings such as lust and rage. The shadow wants to be acknowledged and brought into consciousness. Jungian analysts Zweig and Wolf point out if we embrace and “romance” the shadow, we will channel it to productive use and gain access to vitality and creativity.

It takes courage to undertake the “shadow work” because it can be painful to come to terms with one’s negative emotions and painful aspects of life, such as personal traumas and family secrets.

## Individuation – The Process Toward Wholeness

The process of individuation is to reconcile and integrate the various differentiated components into a coherent and balanced whole. Thus, it integrates the ego (center of consciousnesses) with the shadow, anima (the feminine personality characteristics) with the animus (the masculine characteristics), the rational (thinking and feeling) and irrational (sensing and intuition) psychic functions. This is an innate and natural process of human growth.

Individuation is essential for fulfilling one’s full potentials and flourishing, but it is a painful process. One of the common themes in Jungian analysis is that just as there is no rebirth without death, there can be no wholeness without realizing our brokenness, and no self-actualization without suffering.

SEE ALSO: ► Humanistic psychology

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# Justice

Arménio Rego,<sup>a</sup> Miguel Pereira Lopes<sup>b</sup> and Miguel Pina e Cunha<sup>c</sup>

<sup>a</sup>*Universidade de Aveiro, Portugal;* <sup>b</sup>*Instituto Superior de Psicologia Aplicada, Portugal;* <sup>c</sup>*Universidade Nova de Lisboa, Portugal*

## In the Eye of the Beholder

Colloquially, the terms *justice* or *fairness* are used to connote “oughtness” or “righteousness.” In the sphere of ethics, an act’s justness is assessed through the lens of the laws of a philosophical system. In the social sciences, such as those concerning organizational or community psychology, justice is considered to be socially constructed. Organizational justice, for instance, is the study of the perception of fairness in the workplace. As such, though not completely subjective, justice is mainly in the eye of beholder. Considering both universal and cross-cultural effects, some authors have suggested the integration of etic and emic perspectives for understanding justice perceptions.

## Areas of Study and Correlates of Justice

Justice is an important topic in psychology and a personal virtue or personal strength as well. Authors including Piaget, Kohlberg and Damon have elaborated robust theories regarding the human development of moral reasoning and justice orientation. Kohlberg, for instance, has proposed the *just community approach*, according to which moral values that are justice-based can be nurtured in a Socratic style. In his theory, Kohlberg argued in defence of a positive approach based on the universal ethics of moral norms such as life-preservation, prosperity and truth. At the organizational level, justice has also played an important role. Performance appraisal, employee theft, employee discipline, extra-role behaviour, conflict resolution, layoffs, organizational staffing, drug screening, strategic decision making, negotiation, mentoring, organizational change, service recovery, budgeting – all these areas were captivated by studies about implications and applications of organizational justice. Justice is said to impact several outcomes, either directly or through mediating variables (e.g., perceived organizational support): work performance, stress, counterproductive behaviours, work satisfaction, organizational commitment, trust in the organization and its leaders, turnover intentions and emotions. Justice can also act as a mediator (e.g., between leadership and extra-role behaviours).

## Main Components in Justice’s “Life Story”

The study of justice in psychology has been approached with different lenses and at different levels of analysis. However, because authors have been interested in

understanding how to promote more just reasoning and behaviour in people, much of the research has been conducted at the level of organizations and communities. This is the case of work organizations where researchers have initially focused on *distributive justice*, i.e., the justice of decision outcomes (e.g., salary). Most research derives from Adams, who advocated the *equity principle* (outcomes should be allocated proportionally to contributions). It has been proposed that equity is the appropriate rule for productivity goals, but equality and need-based principles can be appropriate in different contexts (e.g., equality for positive/harmonious interpersonal relationships). Preferences for those rules are also cross-culturally contingent. Later, researchers as Thibaut and Walker focused on *procedural justice* (e.g., how the salary was determined). It exists when employees have a voice in a decision-making process or are allowed influence over the outcome, or when processes adhere to fair criteria (e.g., consistency, ethicality). People value fair procedures because they perceive them as instrumental for receiving favourable outcomes and/or indicators of the extent to which the group values them and makes them feel good. Bies and Moag introduced the notion of *interactional justice*. It is fostered when decision makers treat employees with dignity and respect and explain the rationale for decisions affecting them. Greenberg proposed that interactional justice embraces *interpersonal justice* (the extent to which people are treated with dignity and respect by authorities or third parties involved in executing procedures or determining outcomes) and *informational justice* (explanations conveying information about why certain procedures were used or outcomes were allocated in a certain fashion). The distinction between justice *type/content* (e.g., how decisions are made vs. quality of treatment) and justice *source* (e.g., formal organizational rules/procedures vs. informal experiences with supervisor) has been recently proposed. Regarding procedural justice, Blader and Tyler crossed empirically sources-types and extracted four distinct components: a) formal decision making; b) formal quality of treatment; c) informal quality of decision making; and d) informal quality of treatment.

## Creating Just, Positive Psychological Environments

This research has led psychologists to understand better how to create positive environments that can provide higher perceptions of justice, as well as organizational climates where people can flourish and thrive. For example, research has shown that procedural justice shows stronger effects than distributive justice on system-referenced attitudes, such as organizational commitment; and that interpersonal/informational justice reveals stronger effects than does the procedural dimension on agent-referenced variables such as organizational citizenship behaviours addressing supervisors. Justice dimensions also interact. For example, each dimension may reinforce or mitigate the effects of other dimensions. Organizations wishing to appear as just and to create positive environments must maintain fairness in procedures, interactions and outcomes alike.

Given all this evidence, it does seem that organizational justice can engender positive subjective experiences, reinforce the positive aspects of institutions and make life worth living. Schools also need to embody the values of justice within their institutional practice. Authors such as Gardner, Csikszentmihalyi, and Damon, in their book *Good Work: When Excellence and Ethics Meet*, have started to synthesize these relationships between crafting a positive psychological climate and increasing ethical behaviour and perception. However, further research is yet to explore: a) how justice explains physical health, happiness and psychological capital; b) how justice dimensions interact to promote employees' strengths; c) how virtues and affective states influence justice perceptions, for example, do people perceive more/less fairness when feeling good/bad?; d) do *psycap* variables moderate the relationship between justice and employees' reactions? For example, do hopeful employees avoid retaliating against unfairness?; e) do authentic leaders foster justice and/or reinforce the positive reactions to a fair workplace?; f) do fair workplaces encourage employee civic engagement?; and g) does the "swindler" or "hollow" justice damage employees' *psycap* and organizational virtuousness? These and other studies may be especially fruitful if carried out in both traditional working contexts and in new ones (e.g., virtual teams, self-managed teams, cross-cultural teams).

SEE ALSO: ► Authenticity ► Leadership

# K

## Kahneman, Daniel

Ed Diener

*University of Illinois*

Daniel Kahneman is one of the most renowned psychologists of the twentieth century. His awards include the American Psychological Association's Distinguished Scientist Award (1982) and Award for Lifetime Contribution to Psychology (2007), the Grawemeyer Award in Psychology, and the Nobel prize in economics in 2002. These awards were based on his work in the field of judgment and decision making, carried out with his close friend and collaborator, Amos Tversky. Their work on heuristic shortcuts in decision making is a classic of psychology. Although less widely known, Kahneman's work related to positive psychology has also been of fundamental importance.

Daniel Kahneman's early boyhood years were spent in a France occupied by the Nazis. After World War II, his family moved to Israel, where he received his bachelor's from Hebrew University. He traveled to the United States to obtain his PhD from the University of California at Berkeley and then returned to Hebrew University as a professor. In 1978 Kahneman moved to the University of British Columbia, returning in 1986 to the University of California at Berkeley. Finally, he moved to the Woodrow Wilson School of policy at Princeton University in 1992, where he has spent the remainder of his career.

An area of Kahneman's work related to positive psychology asks questions about how people recall and predict happy and unhappy moments. In his now famous peak-end experiments, Kahneman demonstrated that in recalling pleasant and unpleasant episodes, people largely neglect the duration of the episode and base their recall on the peak moment, as well as on the final moments. The counterintuitive finding was that an unpleasant addition to an event, if less unpleasant

than what came before, led to the episode being recalled as less unpleasant, despite the greater duration of unpleasantness. Because people's memories of events influence their future choices, Kahneman's work on hedonic memories is important in understanding how people construct and recall a happy life.

Kahneman critically analyzed the economic concept of "utility" (the value a thing has for a person), parsing it into choice utility (what people select among alternatives), remembered utility (how they remember hedonic events), and predicted utility (what they predict about the pleasantness produced by choices they might make). In this way, Kahneman revealed that the choices people make, the type of utility emphasized by economists, is not the only form of well-being that is relevant to people's behavior. In his work on predicted utility, Kahneman described the "focusing illusion," in which people focus on a salient attribute of a choice when making hedonic predictions, and ignore most other features of the choice.

Daniel Kahneman has been a champion of aggregated pleasant moments as the core of happiness, rather than global judgments of life or recalled happiness. In his early view, pleasant moments were the fundamental building block of happiness, and recalled moments were subsidiary. For this reason, Kahneman and his collaborators developed the Daily Reconstruction Method (DRM), which aims to assess happy moments in particular activities. Kahneman subsequently adopted a hybrid model of well-being in which Life Satisfaction and Experienced Happiness are separate constituents.

In 1999 Kahneman, along with Ed Diener and Norbert Schwartz, edited a comprehensive volume on the psychology of pleasant and unpleasant experience, entitled *Well-Being: The Foundations of Hedonic Psychology*. Although much of Kahneman's research has been focused on errors and biases, it is important to positive psychology because it shows how people can go wrong in building a positive life. Furthermore, judgment heuristics can lead in most cases to more efficient decision making. Kahneman's work on the recall, experience, and prediction of momentary happiness is one of the most important programs of psychological research for understanding happiness in terms of pleasant feelings. Thus, Daniel Kahneman is one of the prominent figures in developing our understanding of happiness.

SEE ALSO: ► Happiness

## Kindness

Belinda Campos<sup>a</sup> and Sara Algoe<sup>b</sup>

<sup>a</sup>University of California, Irvine; <sup>b</sup>University of North Carolina, Chapel Hill

*Kindness* is an emotion-based motivation that promotes prosocial behavior without the expectation of a reciprocal benefit. Kindness has evolutionary origins, cultural variability, and beneficial consequences for individuals, relationships, and communities. The disposition for kindness is a personal virtue and interpersonal

strength. The motivations, emotional experiences, and dispositional traits that underlie kindness have long interested psychologists, and aspects of kindness have been studied under terms such as *altruism*, *prosocial behavior*, *sympathy*, *love*, *gratitude*, and *compassion*. Research on kindness as a distinct construct is relatively new, but kindness and kindness-related constructs are recognized as critical factors in the formation and maintenance of the strong social bonds that are vital to human life.

## Origins and Cultural Variability

The willingness to overcome self-interest to benefit others is essential to maximizing the advantages provided by human social life. Cooperative food sharing, for example, involves the short-term sacrifice of sharing food obtained by individual effort for the benefit of close others or groups. By pooling resources, all group members benefit and food providers are assured of a return in kind along with social rewards like status and prestige. Kindness is one factor that promotes this type of prosocial behavior and, in doing so, lays the groundwork for smooth and mutually rewarding social relationships. For these reasons, kindness is valued in social relations that span from short-term interactions with strangers to long-term mates. As evidence of its evolved origins, kindness behaviors have been observed in nonhuman species like elephants and chimps who care-give and share food. Among human infants, kindness behaviors are easily learned and moral principles that emphasize kindness, like benevolence and universalism, are among the most important and widespread value orientations across cultures. The type of kind behavior that is valued by a society does show some degree of cultural variability, with some societies placing greater emphasis on certain types of kind behavior than others. For example, some studies have found that members of Latin American countries are more likely to offer strangers everyday types of assistance such as giving directions than individuals from other parts of the world.

## Motivation, Emotion, and Cognitive Components of Kindness

The motivation for kindness is rooted in the universal human need to belong and to maintain ongoing social relations. This universal need contributes to several social processes that facilitate prosocial focus on others. For example, the ability to take another's perspective increases when individuals see themselves as integrated in satisfying social networks. Individuals who expect trusting, caring, long-term relationships are more able to experience empathy and place prosocial focus on others. Priming these positive expectations of relationship security has been shown to increase kindness-related feelings and behaviors and is associated with compassionate responding, helping, and volunteer activities. Similarly, connections

to broader social groups like ethnic or community groups are associated with greater motivation to engage in kind behavior toward ingroup members. In contrast, being excluded or anxious about the possibility of being excluded decreases individual ability to focus on others and enact kindness-related behaviors.

Whereas the motivation to form and maintain strong social bonds sets the foundation for kindness, the emotional and cognitive components of kindness are its direct elicitors. Kindness is reliably elicited by positive mood and is related to a constellation of prosocial emotions that promote spontaneous approach with the intention of benefiting another (e.g., compassion, empathy, gratitude, love). In an early study on kindness, inducing positive mood by planting a coin in a telephone booth at a shopping mall made the coin recipient more likely to stop to help a stranger pick up dropped papers nearby. Beyond simple “good feelings,” specific positive emotions have also been shown to promote kind behavior toward others. Emerging research on kindness as a distinct emotion suggests that kindness is elicited by a perception that another is in need and that action can be taken to benefit another. In turn, being the recipient of a behavior that is attributed to kindness gives rise to feelings of gratitude and love. Gratitude and love are both associated with kind behaviors to relationship partners in their own right. In this way, kindness can be one starting point to an upward spiral of prosocial feelings that, along with love, gratitude, and compassion, build and maintain bonds between people. Although primarily experienced within the context of close relationships, prosocial feelings of kindness can be extended to broader ingroups, including members of other ethnic and religious groups, or humankind in general. Under these circumstances, kindness is similar to altruism because the individual may not personally benefit from their kind actions, and may even incur significant costs. This could happen, for instance, when someone risks injury to save another or braves social scorn to extend kindness to a member of a disliked outgroup.

Finally, some individuals have a cognitive orientation that results in a tendency to enact kind behaviors more frequently than others. For example, individuals who are high in kind, prosocial orientation are more likely to find cooperative solutions to social dilemmas and more likely to persist at negotiations until mutually beneficial outcomes are found. Indeed, the personality trait of kindness is highly valued and often measured in interpersonal judgments. For example, when men and women are asked to list the qualities that are most important in long-term romantic partners, kindness tops the list. Kindness as a personality trait is also valued in persons in positions of authority and power. Kind people with high levels of power are more likely to act on their impulses and their actions can have prosocial consequences, like donating large sums of money to charity organizations.

## Measuring Kindness

The particular kindness measure favored depends on the behaviors and situational contexts that are being examined. Researchers are often interested in measuring

whether an action was performed from kind intentions, whether a given situation produces kind behaviors, or whether a person is dispositionally inclined to be kind. Common situational contexts include kindness toward strangers, in developing relationships, and in ongoing long term relationships with close others.

### Measuring Kindness Motives

Kindness motivations are most frequently measured via self-report. For example, a researcher who wants to examine why an individual believes he or she performed a specific kind behavior might ask that individual to rate or describe their reasons (i.e., motivations) for the action. On the other hand, if a researcher is attempting to determine whether kindness is *produced* by a given situation, kindness motives can be measured as an outcome. For example, researchers might experimentally manipulate moral obligation and ask participants to rate the extent to which they are motivated to engage in a variety of prosocial behaviors as a result. Alternatively, participants might be shown scenarios of kindness-related behavior and asked to provide open-ended responses that describe what they would be motivated to do in such a situation. These open-ended descriptions of motivation could then be coded for prosocial behaviors by independent observers.

Although an individual has one perspective on his or her kind actions, there are two other ways in which a researcher might assess the kind motives of an individual. First, a researcher might ask a *recipient* of a benefit to assess whether the benefactor's actions were based on kind intentions. In one study using an annual sorority tradition in which new members were welcomed through kind actions of a mentor, the new members' attributions of their mentor's kindness in providing the benefits was found to be associated with positive feelings and promotion of the relationship with that mentor. This type of approach is useful when a researcher is interested in understanding the impact of kindness on others. Finally, several studies have used experimental manipulation to produce behaviors that can be inferred as resulting from kind motivations or from self-focused motivations. For example, researchers examining the willingness to help strangers induce empathy by giving participants information about their similarity to a person in need. To assess whether assistance is given from other-focused kindness, researchers give participants the opportunity to help or leave the situation. Not surprisingly, individuals motivated by other-focused kindness are more likely to stay and help someone in need whereas those who experience self-focused distress are more likely to leave the situation.

### Measuring Kind Actions

Another way to measure kindness is through the direct observation of kind behaviors in naturalistic settings or as outcome measures in laboratory experiments. There are a wide variety of kind behaviors that can be measured, depending on



the phenomenon of interest. For example, researchers have measured volunteering rates, donations of money to national charities, time spent helping an actor in a laboratory experiment, dollars given to an interaction partner in a money distribution task, and parent–child interactions in the home. Direct observation is accomplished by having an experimenter or an actor in a laboratory session record behavior after it happens, for instance by counting the frequency or timing the duration of kind behaviors. This can also be accomplished by trained observers in naturalistic settings such as a playground. In the laboratory or in naturalistic settings, audio and/or video recording devices are sometimes used to allow more detailed coding by a set of trained judges at a later date. Sometimes, when direct observation is impractical, participants are asked to self-report what they *did* do in a specific situation. For example, in longitudinal studies in which participants complete an end-of-day record of their interactions with a romantic partner, participants might report on the extent to which they provided emotional support to their partner that day. To verify, researchers sometimes have the romantic partner report on the participant's behavior as well.

### Measuring Dispositional Kindness

Finally, the disposition to be kind is often measured by individual self-report or peer reports that capture the extent to which an individual evinces a general orientation toward kindness and enacts kind behaviors in their everyday life. The disposition for kindness is typically used as an independent or predictor variable of prosocial actions such as providing care, social support, or engaging in volunteer activities. A recent measure of dispositional kindness is included in the Values in Action Inventory of Strengths (VIA-IS). This measure is a self-report scale that taps into the extent to which an individual endorses characteristics related to kindness (e.g., generosity, compassion). Related measures of the disposition for kindness include self-report scales of the tendency to feel empathy and compassionate love.

### Additional Measurement Considerations

The reliance on self-report in kindness research has limitations that are inherent to humans' limited capacity for accurate introspection. However, the measurement of kindness motives contains additional constraints because kindness is a valued behavior and disposition. Self-reported motives to do something kind in the future may be elicited by normative expectancies about what one "ought" to do and may not translate to behavior. This is not to say that valuable information cannot be gleaned from self-report measures, but behavioral measures should be used whenever possible. Sometimes, self-report is supplemented with third-party (e.g., spouse, parent) reports on the participant's behavior or disposition or is statistically controlled via the use of scales that measure the tendency to give socially desirable responses to questions.

## Consequences for Individuals, Relationships, and Groups

Kindness is associated with a number of positive consequences for individuals. People who are happy and secure are more able to be kind, and there are indications that kindness promotes social rewards and health. The disposition for kindness is highly valued in long-term mates by both genders and, for U.S. women, an agreeable, prosocial disposition is associated with more stable marriages and long-term life satisfaction. There are also emerging indicators in the literature that kindness may be associated with improved health. For example, one study of giving and receiving support among older couples found that giving instrumental support to others by helping with transportation, errands, shopping, household, and childcare was associated with reduced risk of death. Further, this reduced risk of mortality did not extend to receiving support, but was uniquely associated with giving support.

Kindness is most pervasive and has the most pronounced positive consequences in ongoing close relationships or in relationships that might become close. Kindness promotes willingness to form new relationships and contributes to the maintenance and strengthening of existing social bonds. When individuals attribute another's behavior to kindness, they are more likely to appreciate and express gratitude for a helpful behavior, which may have implications for the relationship. In romantic couples, it has been shown that reacting to a partner's positive event in a way that is perceived to be responsive to the partner's self (i.e., understanding, validating, or caring for the discloser) is associated with higher perceived relationship well-being by the partner. Beyond close relationships, adopting a generous strategy toward others may be beneficial for long-term interactions. In economic games, it has been widely acknowledged that a "tit-for-tat" strategy of exchanging favors is the most advantageous for the individual. However, one might also adopt a "generosity" strategy, by behaving a bit more generously than one's interaction partner did on the previous turn. With this approach, an interaction partner is more likely to "forgive" transgressions that may arise from unintentionally missed turns, thus maintaining cooperation.

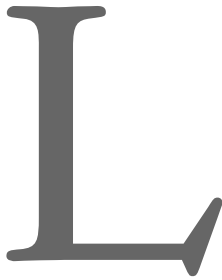
To the extent that kindness promotes relationships, it can help to facilitate an interconnected web of loyalties within a group that benefits group social life. For example, after a few days of being showered with kindness by an older group member, new sorority members showed an increase in feelings of integration within the sorority. Additionally, grateful recipients of help in laboratory experiments have been shown to misattribute their prosocial feelings toward a benefactor and willingly incur a greater cost to help a *stranger* than participants in a control condition. To the extent that one is kind to a nonclose other, it is more likely to occur toward narrowly defined ingroups like members of the same ethnicity, religion, or nationality than broadly defined ingroups like humanity as a whole. However, *dispositional* kindness is associated with greater likelihood of extending

kindness toward broader outgroups and with pursuing mutual beneficial solutions to group social dilemmas.

## **State of the Research and Future Directions**

The capacity for kindness is demonstrated by all humans and is universally considered both an intrapersonal virtue and interpersonal strength. Research interest in kindness-related processes continues to grow and stands to elucidate further the motivational, emotional, and cognitive processes involved in kindness. To date, the study of kindness has already started to expand from an almost exclusive focus on stranger interactions to the contexts where kindness and prosocial behavior are most extensively observed – in ongoing relationships with friends, family, romantic partners, and other members of daily life. In time, this accumulated knowledge of kindness may prove instrumental in the design of interventions that promote the development of this prosocial disposition and capitalize on its positive consequences for individuals, relationships, and communities.

SEE ALSO: ► Altruism ► Character strengths ► Compassion  
► Gratitude ► Love



## **Labeling (Positive Effects)**

Jeana L. Magyar-Moe

*University of Wisconsin – Stevens Point*

Labeling occurs when names are given to things categorized together based on shared characteristics. Labels can be useful in helping people to organize and simplify the world and they often serve as a shorthand method of conveying understanding. The process of labeling humans is full of inherent power as well as problems.

## **Negative Effects of Labeling People**

Labels are very powerful, especially when applied to people. Within psychology, the most commonly used labels are diagnoses of pathology from the *Diagnostic and Statistical Manual of Mental Disorders* (DSM). Such diagnoses are considered by most to be negative, as they represent problems or deficits in functioning. Indeed, negative effects of labeling most often occur when the labels applied are negative or when they are inaccurate.

### **Miscommunication**

Although labeling can promote discourse, it can also lead to miscommunication when the sender and receiver fail to hold the same definitions of the labels being applied. Unfortunately, most people assume that others share their meanings, thus, miscommunications go unnoticed. In addition, when labeling others, most people have the tendency to believe that the labeled person is now better understood

by virtue of his or her label. In other words, the label is often erroneously seen as being very meaningful. In reality, the label is only a starting point for describing the person; full understanding of others cannot be achieved through the use of labels as verbal shortcuts.

### Deindividuation

The application of labels to individuals results in the creation of ingroups and outgroups. Those who are labeled make up the *ingroup* whereas those who do not receive the label constitute the *outgroup*. When groups are labeled, most people fail to recognize the differences that exist among members within a group, and to overemphasize the differences between groups. Hence, deindividuation occurs whereby the behavior of a person who is perceived and labeled as a member of a group is overlooked or seen as less informative than if the same behavior were to be observed in that person in the absence of a label and group membership.

Prejudices may be developed through the process of labeling and creating ingroups, outgroups, and deindividuation. Indeed, prejudice occurs when people focus on one dimension of a person, label that person as part of a group based on that dimension, and then assign different, negative behaviors to people in that ingroup versus those who are part of the outgroup.

### Miscommunication and Deindividuation in DSM Diagnostic Labels

The use of DSM diagnostic labels can result in unintentional error and bias on the part of clinicians, despite the popular notion that such labels serve to enhance therapist understanding of clients and to facilitate professional communications. These problems arise due to the fact that the DSM system is based on the assumption that all people who enter clinical settings are diagnosable and that there is a true dichotomy between normal and abnormal functioning. The criteria, however, for normality and abnormality are extremely vague. As such, the criteria for assigning distinct, categorical diagnostic labels are vague as well. For example, according to the DSM, fourth edition, text revision (DSM-IV-TR), one can be diagnosed with Borderline Personality Disorder if he or she meets criteria for five out of nine possible symptoms. Assume that two clients are assessed and one is found to meet the criteria for symptoms one to five and the other for symptoms five to nine. Both of these clients are labeled with Borderline Personality Disorder, yet they have only one overlapping symptom. As a result of deindividuation, most people will ignore the differences between these two people who are perceived to be members of the same ingroup while highlighting the differences between these individuals and those without the label that make up the outgroup. Indeed, the process of deindividuation may lead to dehumanization, whereby the person is seen as being equivalent to the disorder label. The conditions are ripe for prejudice and extreme biases at this point. In addition, members of the outgroup (i.e., clinicians) are more likely to pathologize the experiences of members of the ingroup

(i.e., clients) and to ignore the role of environmental factors in contributing to the perceived problems of the ingroup. Such a system provides fertile ground for misunderstanding clients (research supports that people make poor decisions under conditions of uncertainty) and for transferring this potentially inaccurate client assessment to others through relying on the diagnostic label as a shortcut for communication. In addition, when psychodiagnostic labels are applied and used by those outside the psychology profession, the potential for misunderstanding and miscommunication becomes even greater.

### Self-Fulfilling Prophecy

Labeling can shape the perceptions and beliefs of both those who assign labels to others, as well as those to whom the labels are assigned. In other words, labels influence how a person treats the labeled individual and even how the individual with the label comes to view him or herself. Through the self-fulfilling prophecy process, labels may be internalized and then affect behavior and motivation. This can be especially problematic when the labels applied are negative and/or inaccurate.

### Self-Fulfilling Prophecy in DSM Diagnostic Labels

Diagnostic labels may skew the perception of the clinician, the client, and others who are informed about the diagnosis in such a way that all behaviors of the client are interpreted in light of the label. Information that is consistent with the deviant label (i.e., that which is negative) may be highlighted while that which is not consistent (i.e., that which is positive) is overlooked. It is possible, therefore, that a well-intentioned practitioner may develop a hypothesis about a client's functioning, gather and attend to information that supports this hypothesis, and to find support from the client who readily agrees with the assessment of the professional whom the client sees as an expert. Hence, a negative collaborative illusion is developed and internalized by both the clinician and the client which serves to effect how the clinician treats the client as well as how the client thinks about him or herself and subsequently his or her behaviors and motivations.

## Positive Effects of Labeling People

Although there are many potential problems associated with labeling people, positive outcomes can be achieved through the labeling process as well. Labels can have positive effects and be very enabling when they are used to identify more than just problems or deficits in human functioning. Indeed, when strengths and resources are labeled in addition to weakness and deficits, even the labeling of psychological disorders can have positive effects. A balanced dimensioning model of labeling people has been proposed as an alternative to the traditional DSM diagnostic system.

### Labeling Strengths

The application of a label to a person tends to bring with it the belief that one now better understands that person and that his or her label carries with it deep meaning. Such power is often detrimental when labeling weakness or deficits; however, when the valence of the label is changed and positive strengths and resources are being described, the power of the label is then strongly positive. Indeed, by explicitly naming human strengths, the person labeled as well as those who are informed of his or her label come to find merit in the label. Human strengths become salient when named.

### Self-Fulfilling Prophecy

The self-fulfilling prophecy may come into play when people are labeled as having talents, strengths, abilities, and positive resources. Just as people who are labeled with disorders may come to internalize their negative labels, so too may people come to internalize positive labels. Just as clinicians may inadvertently change the way they treat a client based on the diagnostic label applied, so too may a clinician change the way the client is treated based on the positive label applied. Such a process may serve to further enhance the labeled strengths as the individual becomes more cognizant of his or her potential, more interested in nurturing these talents and strengths, and more confident in utilizing these skills and positive resources.

### The Dimensioning Approach Alternative to the DSM Diagnostic System

In order to ensure that labels applied to people in psychological contexts result in positive effects, an alternative model to the current DSM diagnostic system has been proposed. The model consists of viewing clients as individuals whose behaviors and experiences can be charted at various places on a variety of continua. In other words, rather than determining whether the client meets inclusion/noninclusion criteria for a particular diagnostic category, practitioners assess the client on a variety of individual difference dimensions that will provide a thorough view of the specific person. Each dimension consists of a range of possible scores such that a client could fall anywhere along the continuum from maladaptive to adaptive. Clinicians are further urged to be sure that the dimensions of assessment represent the four major components of the four-front approach to assessment, namely exploration of both liabilities and assets within the person *and* his or her environment.

The application of the balanced dimensioning approach to diagnostic assessment can counteract the many negative effects of negative labels as described previously. In addition, clinicians can capitalize on the positive effects of labeling, even when helping clients to overcome areas of problem and weakness. Indeed, the dimensioning approach provides a more balanced, well-rounded conceptualization of the client whose make-up had previously been closely linked by both the

client and clinician to the presenting problem. Additionally, the labeling of assets and strengths may provide clinicians with a starting point from which to build a treatment plan and can serve as sources of motivation for clients to work from in the therapeutic treatment process.

SEE ALSO: ► *Diagnostic and Statistical Manual* ► Four-front assessment approach

## Laughter

Rod A. Martin

*University of Western Ontario*

Laughter is a distinctive pattern of vocalization, respiration, and facial expression that accompanies the experience of humor and mirth. Many authors have commented on the oddity of this set of behaviors, noting the loud, barking noises that are emitted, the repetitive contractions of the diaphragm and associated changes in respiration, the open mouth and grimaces caused by contractions of facial muscles, the flushing of the skin, increased heart rate and general physiological arousal, production of tears in the eyes, and flailing body movements. Hearty laughter seems to take over the whole organism in an almost uncontrollable way, and is very contagious and difficult to fake. What a peculiar way for people to respond to the perception of humor!

Laughter is a universal aspect of human experience, occurring in all cultures and virtually all individuals, and the sounds of laughter are indistinguishable across cultures. Developmentally, it is one of the first social vocalizations emitted by infants, beginning at about four months of age. Cases of gelastic (i.e., laughter-producing) epilepsy in newborns indicate that the brain mechanisms for laughter are already present at birth. The innateness of laughter is further demonstrated by the fact that even children born deaf and blind laugh appropriately without ever having observed laughter in others.

Besides occurring in humans, a form of laughter is also seen in chimpanzees and other species of apes. Chimpanzee laughter has been described as a staccato, throaty, panting vocalization that accompanies the *relaxed open-mouth display* or “play face,” and is emitted during playful rough-and-tumble social activities such as wrestling, tickling, and chasing games. These are very similar to the types of play activities that also accompany much of the laughter of human infants and young children. Although ape laughter sounds somewhat different from that of humans, it seems clearly to be a homologous behavior, suggesting that the evolutionary origins of laughter date at least to our common ancestor with chimpanzees, some 6 million years ago. Laughter therefore seems to have originated in social play and to be derived from primate play signals. With the evolution of greater intellectual and linguistic abilities, humans have adapted the laughter-generating play



activities of their primate ancestors to the mental play with words and ideas that we now call humor.

Ethologists characterize laughter as a *fixed action pattern*, a type of ritualized and largely stereotyped behavior pattern that serves as a communication signal between members of a particular species. Charles Darwin noted that laughter is essentially an emotional display, a way of communicating to others that one is experiencing a particular emotion. Just as scowling, shouting, and clenching the fists form a set of behaviors that communicate the emotion of anger, laughter conveys the unique positive emotion associated with humor. Martin has proposed the word *mirth* as a technical term to denote this particular emotion. The more intense the emotion, the stronger the expressive display. At low levels of intensity, mirth is expressed by a faint smile, which turns into a broader smile and then audible chuckling and laughter as the emotional intensity increases. At very high intensity, it is communicated by loud guffaws accompanied by vigorous body movements, such as throwing back the head, rocking the body, slapping the thighs, and so on.

## Functions of Laughter

The function of laughter seems to be primarily one of interpersonal communication. Most laughter occurs in the presence of other people rather than when alone. Many theorists have suggested that the main function of laughter, in humans as well as apes, is to signal to others that one is engaging in play, rather than being serious. When chimpanzees are playfully fighting and chasing each other, it is important for them to be able to let each other know that they are just having fun and not seriously intending to harm one another. Similarly in humans, laughter can be a signal of friendliness and playful intentions, indicating that one is in a nonserious and nonthreatening frame of mind. The laughter accompanying friendly teasing, for example, signals that a seemingly insulting message is not to be taken seriously.

More recently, researchers have suggested that the purpose of laughter is not just to communicate that one is experiencing a playful emotional state, but to actually induce this state in others as well. According to this view, the peculiar sounds of laughter have a direct effect on the listener, inducing positive emotional arousal that mirrors the emotional state of the laugher, perhaps by activating certain specialized brain circuits such as mirror neurons. Some recent brain imaging studies provide support for this view. In this way, laughter may serve an important biosocial function of coupling together the positive emotions of members of a group and thereby coordinating their activities. This would explain why laughter is so contagious.

## Acoustics

The characteristic that most strikingly distinguishes laughter from other human activities is the loud and distinctive sounds that are emitted. Researchers have recently

begun to study the acoustics of laughter using computer-based spectrographic procedures. The unit of analysis in these studies is the series of “ha-ha-ha” sounds that are made during a single exhalation. Such a laugh episode is referred to as a *laughter bout*, and the individual “ha” syllables are called *notes*. These studies reveal that the typical laughter bout averages between three and four notes, with a normal range of one to eight. Each note begins with a protracted voiceless aspirant (i.e., a hissing *h* sound not produced by vibration of the vocal chords), followed by a forcefully voiced vowel-like sound. Regardless of the number of notes in a bout, the duration of each note (onset-to-onset internote interval) tends to remain fairly constant, at about 200 milliseconds. The voiced segment of successive notes within an individual bout becomes progressively shorter, while the intervening unvoiced segment becomes correspondingly longer, thus maintaining the same overall duration for each note. The amplitude (loudness) of successive voiced note segments tends to decrease from the beginning to the end of a bout.

While these basic acoustic characteristics of laughter remain fairly constant, there is also a considerable amount of variability and complexity in other parameters, both within and between individuals. For example, several different types of individual laugh notes have been identified, including voiced “song-like” and unvoiced “grunt-like” and “snort-like” notes. Several of these different types of notes are often observed within a single bout of laughter, and there is little consistency within individuals in the types of notes they produce from one bout to another. In addition, the fundamental frequencies (corresponding to the perceived pitch) of laugh notes show a considerable amount of variability, both between and within individuals. Thus, while showing some degree of stereotypy, laughter may be characterized as a “repertoire of sounds” that may be combined in various ways to communicate subtle differences in emotional meanings.

## Respiration and Phonation

Regardless of where the person happens to be in the normal breathing cycle when laughter begins (i.e., inspiration or expiration), it typically starts with an initial forced exhalation that brings the lung volume down to around functional residual capacity (i.e., the volume that remains after a normal expiration). This is followed by a sustained sequence of repeated, rapid, and shallow expirations which, when accompanied by phonation, produce the “ha-ha-ha” of laughter. By the end of this expiratory laugh bout, the lungs reach residual volume (i.e., the air volume remaining in the lungs after maximal expiration). Thus, laughter typically occurs at a low lung volume, forcing out more air from the lungs than normally occurs during breathing.

The predominantly expiratory respiration pattern during laughter is produced by saccadic contractions of muscles that are normally passive during expiration, including the diaphragm, abdominal (*rectus abdominus*), and rib cage (*triangularis sterni*) muscles. Respiration during laughter is also regulated by the larynx, which

serves as a valve separating the trachea from the upper aerodigestive tract. In the larynx, the glottis (comprising the vocal folds) initially closes to prevent the air from being exhaled too quickly, causing a buildup of subglottal air pressure. The glottis then begins to open and close rhythmically, permitting short bursts of pressurized air to escape. Each time the glottis closes to a narrow slit, the vocal cords begin to vibrate, producing the “ha” sounds. Whenever the glottis opens more widely, it stops vibrating, and the escaping air produces the unvoiced *h* sound between each voiced note. The sound vibrations are carried through the vocal tract, whose shape amplifies or dampens various frequency characteristics of the sounds. The amount of tension on the vocal cords; position of the larynx, tongue, and jaw; shape of the mouth and lips; and even the degree of contraction of various facial muscles (all of which can be influenced by the person’s current emotional state) further affect the sound quality of the laughter.

## Facial Expressions

Studies of the facial expressions accompanying smiling and laughter have found only one pattern that is reliably associated with genuine enjoyment or amusement. This facial expression has been named the *Duchenne display*, after the French anatomist who first identified it in 1862. Other facial expressions are associated with feigned amusement or the presence of negative emotions such as embarrassment or anxiety mixed with the enjoyment. The Duchenne display involves symmetrical, synchronous, and smooth contractions of both the *zygomatic major* (the muscle in the cheeks that pulls the lip corners upwards) and the *obicularis oculi* (the muscle surrounding the eye socket that produces wrinkling of the skin at the outer edges of the eyes). Although most types of smiles involve contractions of the zygomatic major, only genuine enjoyment smiles and laughter also involve the obicularis oculi. Thus, the presence of “crow’s feet” wrinkles along the out-sides of the eyes is an indicator of genuine amusement.

Studies of individuals with damage to various parts of the brain indicate that Duchenne and non-Duchenne facial expressions are controlled by two different pathways in the brain. Non-Duchenne smiling and laughter are controlled by voluntary motor areas in the cortex, whereas the Duchenne display is controlled by subcortical emotion-related regions in the basal ganglia, limbic system, and brainstem. Thus, non-Duchenne laughter is subject to voluntary control, whereas Duchenne laughter is emotional, involuntary, and difficult to fake.

## Autonomic and Visceral Concomitants

Like other emotions, the emotion of mirth that is expressed by laughter also produces changes in many parts of the body via the autonomic nervous system and endocrine (hormone) system. Studies of the bodily effects of mirth indicate

activation of the sympathetic-adrenal-medullary (SAM) system, the well-known fight-or-flight response of adrenaline and noradrenaline secretion under the control of the hypothalamus and sympathetic nervous system. This system, which is also involved in stress-related emotional responses such as fear and anger, produces increases in heart rate, blood pressure, muscle tension, sweating, and so on. In addition, extended periods of mirth are associated with activation of the hypothalamic-pituitary-adrenocortical (HPA) system, the classic stress response that causes the adrenal cortex to release cortisol into the bloodstream.

It may seem puzzling that the positive emotion of mirth is accompanied by the same general pattern of physiological arousal as are stress-related negative emotions like fear and anger, which are known to be injurious to physical health. However, it should be noted that stress-related illnesses tend to result from chronic activation and inadequate recovery from sympathetic arousal. The more phasic, short-term arousal associated with mirth is therefore less likely to have such adverse consequences. In addition, some researchers have suggested that, although the peripheral somatovisceral changes accompanying mirth may be quite similar to those associated with negative emotions, there are likely to be important differences in the brain systems underlying these emotions, including the biochemical molecules (e.g., neuropeptides, neurotransmitters, opioids) that are produced. These in turn may have different implications for health, such as different effects on components of the immune system. The brain structures and biochemistry underlying mirth and laughter are not well understood, however, and further research is needed before we can say with confidence whether mirth and laughter have any beneficial health effects.

SEE ALSO: ► Evolutionary psychology ► Positive emotions ► Smiles

## Leadership

Tiffany M. Greene-Shortridge and Thomas W. Britt

*Clemson University*

Leader emergence and effectiveness have long been of interest to researchers and practitioners alike. Research concerning leadership has concentrated on the trait characteristics that make effective leaders, the type of situation in which leaders emerge, and the importance of identifying a universal conceptualization of what leadership encompasses. As humans, we have a desire to understand why some leaders are more effective at leading teams, organizations, and countries than others who have attempted to do so and have failed. Interest in effective leader behaviors began in the 1950s and 1960s with the Ohio State University and Michigan University studies, with the focus on universal traits in leaders, and continues today with a heavier concentration on leader skills and development.

## Theories of Leadership

Although there has been a vast amount of research in the leadership field, there tends to be little agreement on the definition of the construct. Indeed, leadership has been defined in terms of social exchange relationships, power and influence, personality characteristics, goals and purposes, and behavioral outcomes. Hence, our conceptualization of leadership may be confusing and somewhat perplexing. However, across most definitions of leadership, there tends to evolve a common theme that encompasses leaders as individuals who move a certain group toward a common goal or mission. The nature of this action though is rarely agreed upon by leadership researchers.

Generally speaking, there have been four major trends in leadership theory and research. Up to the late 1940s, the trait approach to leadership dominated the field. The trait approach claimed that leaders have an innate ability to lead; hence, leaders are born, they are not made. The style approach to leadership dominated the field from the late 1940s to the late 1960s, claiming that leader effectiveness depended upon leader behavior. From the late 1960s to the early 1980s however, the contingency approach took hold. The contingency approach claimed that leader effectiveness is contingent upon the situation or context that the leader is placed in. Since the early 1980s, leadership theory has focused on the “new look” of leadership, which claims that leaders inspire innovation, share and believe in a common vision, and have close social ties with others. Each of these trends is discussed in more detail below.

### Trait Approach

The trait approach to leadership emphasized a search for the “great man.” Leaders were believed to have specific innate traits that led them to be leaders over other individuals who may have lacked such characteristics. However, research utilizing the trait approach failed to yield any consistency among traits in individuals deemed to be effective leaders. Thus, trait theories of leaders tended to die out in the 1950s. Yet, with a renewed interest in examining leader traits, researchers in the mid 1970s began unveiling universal skills, such as persistence and vigor, which were found to be related to leadership. Today, traits predicting effective leadership include honesty, self-confidence, cognitive ability, high energy, and stress tolerance.

It is important to note that the way traits are conceptualized today may differ from the way that researchers have operationalized them in the past. In today’s research, traits seem to encompass many more variables, such as behavioral patterns, than they have in the past. Thus, researchers today should be aware of the problems in treating ‘trait’ as an all-encompassing term, which may have negative consequences later.

## Behavioral (Style) Approach

Around the late 1940s the shift in leadership theory moved from the trait approach to leadership style, which placed an emphasis on the type of behavior that leaders exhibited. With the emphasis on the behavior of leaders, the majority of research during this time concentrated on two primary concerns. The first concern was with identifying the dimensions of leadership styles, or behaviors. Second, researchers were concerned with distinguishing among these styles to identify the most important behaviors that would discriminate between effective and ineffective leaders. During this period that emphasized the behavioral approach, the Ohio State University and Michigan University studies were influential in their quest for behaviors emulated by effective leaders.

Many critics of the behavioral approach have pointed out problems with the theory, with the primary problem being the lack of situational analysis. Furthermore, measurement issues made interpretation of the findings problematic, such that results were often skewed due to leniency effects. However, the failure of the behavioral approach to acknowledge the influence of the situational context on leadership behavior and outcomes is the biggest omission of this theory. Thus, as will be discussed next, subsequent research began to take into account the importance of the environment or situation on leadership effectiveness.

## Contingency Approach

Fiedler's contingency model was the first to articulate the interaction of leader traits and situational variables. More specifically, Fiedler divided the motivational structure of leaders into relationship and task-oriented groups based upon the leader's description of his/her least preferred coworker (LPC). Additionally, Fiedler examined these two types of leaders in eight different situational types. One of Fiedler's central arguments was that particular leadership styles worked best in particular situations. For example, a task-oriented leader is going to perform best in situations where subordinate ability and/or motivation is low, whereas a relationship oriented leader is likely to perform better under conditions of high subordinate motivation and ability. Fiedler's contingency model has attracted some criticism, primarily due to his utilization of the LPC scale in determining leadership style and the nature of the evidence Fiedler cites for supporting his framework.

The normative decision making model, proposed by Vroom and Yetton, is yet another contingency approach created to assist leaders in determining which type of decision procedure would be the most beneficial considering the situation at hand. The likelihood that subordinates will accept the decision, along with the quality of the decision to be made, is an important component of this model. Vroom and Yetton propose five decision procedures that could be used by leaders to ensure more effective decision making. These include two variations of autocratic decisions, two variations of consultative decisions, and one decision that is made jointly

by the leader and the group. While this model is an improvement over Fiedler's contingency model and has received some empirical support, it is limited in its application to leadership.

Even though it has received mixed reviews, House's path-goal theory of leadership is likely to be the most influential contingency approach today. While Fiedler's model focused on the interaction of traits and situational variables, House's model focuses on the interaction of leader behaviors and the situational context. Although House initially proposed four separate forms of leader behavior (i.e., instrumental, supportive, participative, and achievement-oriented leadership), only the instrumental and supportive leadership behaviors have been tested. The lack of full examination of this model may be one reason for its mixed reviews. Yet, despite these mixed reviews, House is credited for the theory behind his framework, which assumes that leaders are effective when they use path-goal clarifying behavior with subordinates, and that subordinates are intrinsically and extrinsically rewarded for achieving their goals.

### New Leadership

A new approach discriminating between transactional and transformational leaders arose in the early 1980s. This new framework approached leadership with an emphasis on inspiring, motivating, visionary, and innovative leaders. The theory behind this new approach attempts to explain how leaders gain the trust, dedication, respect and loyalty of their subordinates in order to increase performance. This "new" type of leader is often referred to as the *transformational* or *charismatic* leader.

Research has found that relationships between transformational leadership measures and performance measures are more positively correlated than transactional leadership measures and performance. Furthermore, additional research supports the notion that transformational leadership leads to unit and organizational effectiveness over and above transactional leadership. Yet, researchers warn of the possible negative effects that could be brought about by the "dark side of charisma." Negative effects such as these would include poor group decision making (i.e., groupthink), failure to plan for succession, impulsive behavior, and increased dependence upon a leader. Although some of these negative outcomes could result from transformational and charismatic leaders, it is believed that the positive effects of this new leadership will vastly outweigh the negative.

### Measurement Issues in Leadership

The primary method for measuring leadership has been with survey methods that focus on leader behavior. Yet, these measures fail to take into account the situational context that is likely to moderate leader behavior and effectiveness. Furthermore, the construct of leadership has been argued to be directly unobservable.

In fact, observer ratings are often based in part on attributions, which inherently introduce error into any leader measure. However, recent work on implicit leadership theory (ILT) suggests that perceptions of leadership are based on prototypes formed from interactions and experiences with individuals. Because Lord and his colleagues have conceptualized leadership as being in the eyes of the beholder, ILT has implications for greater theory and measurement development in leadership.

In an effort to measure leadership in a quantifiable way, Bass developed the Multifactor Leadership Questionnaire (MLQ), which includes scales of transformational and transactional leadership. Concerning its factor structure, the MLQ has received both criticism and support. In response to these criticisms, the number of scales used in the MLQ has been modified. Avolio has found support for the original model proposed by Bass, as compared to eight other models that were tested. While efforts like this have made measuring leadership easier, critics still point out that leadership is often influenced by the context of the situation, which is nearly impossible to measure in a survey.

## **Antecedents of Effective Leadership and Leader Attributes**

Research on personality characteristics of leaders grew out of a focus on charismatic leadership. Max Weber is often credited with the idea of charisma, which includes a situation that is most often a crisis, an exceptional leader with a solution to end or fix the crisis, and followers that believe in the leader's solution. Furthermore, charismatic leaders are often viewed as having high self-confidence, good communication skills, and a need for influence or power. It is also believed that effective leaders possess the ability to motivate or encourage people through the use of nonverbal gestures.

While it is important to study leader attributes, it is equally important to keep in mind that different contexts may require different traits to be portrayed by effective leaders. For example, stressful situations may demand a more charismatic leader, while situations that require creativity may demand a more innovative leader. However, with that being said, it has been speculated that there are a number of generic personality traits that differentiate effective leaders from the ineffective across most situations. Those leader attributes that have found to be effective across most situations include self-confidence and a tendency to be confident in others, optimism and determination, and the ability to be nurturant and offer developmental opportunities to others.

While counterintuitive to the stereotype of what characterizes a leader, most research findings conclude that effective leaders are nurturant and developmental, not forceful, assertive or aggressive, as most would assume. In fact, Bass contends that transformational leaders promote followers to think for themselves and question the decisions of their leaders. The main point behind transformational



leadership is to mold and shape followers so that they are eventually able to think on their own and solve problems collaboratively with the leader. It is thought that by encouraging followers to challenge leader decisions, tackle opportunities on their own, and to be creative in decision making, they will one day be confident and independent enough to lead on their own.

In addition to leaders portraying certain attributes, leader effectiveness is also thought to arise out of a context that promotes leader emergence. For example, most researchers would argue that leaders are born out of stressful situations in which the leader challenges the status quo and gains follower support by campaigning for beliefs consistently held by the followers. In contrast, other researchers would argue that there need not be a stressful situation for leaders to arise. In fact, some would argue that the leader only needs to carry the same vision as his/her followers. Thus, while leader emergence may not be contingent upon purely stressful situations, a crisis situation may indeed allow for an effective leader to emerge more easily than would a noncrisis situation.

## **Outcomes of Effective Leadership**

Past research has contended that the effects of charismatic leadership are more positive than that of transactional leadership. In fact, there seems to be agreement among leadership researchers that charismatic leaders induce group cohesion and a sense of empowerment, increase performance and motivation, and decrease intragroup conflict. Furthermore, effective leaders are likely to increase followers' commitment to shared goals and also enhance follower satisfaction. However, recent analyses of multiple studies of leadership also shows that both transformational and transactional leadership are frequently related to outcomes, and that the two forms of leadership can in fact work together to promote effective group functioning.

Similarly, recent research has highlighted the importance of gaining followers' social and personal identification. It has been argued that while leaders influence the attitudes and behaviors of their followers', leaders can have a more powerful influence through the identification of those that follow them. For example, research has found that one way leaders are able to influence their followers is through connecting with followers' self-concepts, such that the belief systems of the followers become more aligned with that of the leaders'. Furthermore, leaders can gain followers' social identification through encouraging others to identify with their group, and view membership as a privilege and important dimension of one's identity. Thus, effective leaders may be more likely to gain the personal and social identification of their followers.

Additionally, research has also examined the impact of transformational and transactional leader behaviors on organizational citizenship behaviors, or helping behaviors in the workplace. Findings suggest that transformational leadership behaviors directly influence employee trust and satisfaction, while indirectly influencing organizational citizenship behaviors, such that the relationship is mediated by

followers' trust in the leader. However, transactional leader behaviors have found to directly influence organizational citizenship behaviors, rather than indirectly, like the transformational leadership behaviors. Researchers contend that the different findings between these two types of leader behaviors emphasize the importance of distinguishing transformational from transactional leadership.

Effective leadership has also been suggested to influence organizational and individual health, such that employees may be more happy and healthy when an effective leader is in charge. In alignment with the move towards positive psychology, research in positive organizational behavior suggests that leaders are now faced with the challenge of building employee strength and competence. Furthermore, it has been argued that similarly to the pursuit of the happy/productive worker, we should also be concentrating on the positive/authentic leader, which is likely to shed new light on strengths-based management.

## Future Directions in Leadership

One of the most recent approaches to leadership that has garnered rapid attention among both practitioners and academics is authentic leadership. Avolio, Gardner, Walumbwa, Luthans, and May (2004) define *authentic leaders* as:

those individuals who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values/moral perspective, knowledge, and strengths; aware of the context in which they operate; and who are confident, hopeful, optimistic, resilient, and high on moral character. (pp. 802–804)

A key aspect of authentic leadership is leaders being “who they are” and being capable of harnessing the energy of followers by causing them to identify with the goals of the leader and group to which they belonged.

Research in this area is being guided by a model of authentic leadership illustrating how authentic behavior on the part of the leader results in followers being more likely personally to identify with the leader and collective (e.g., organization), which then leads the followers to experience hope, trust, and positive emotions. These positive emotional states then create the favorable work attitudes of commitment, job satisfaction, meaningfulness, and engagement, which result in the positive outcomes of performance, extra effort, and less withdrawal. The theory also represents the most direct attempt to apply basic principles of positive psychology to the area of leadership. Proponents of authentic leadership are concerned about more than followers improving the bottom line of material success. They emphasize the importance of leaders creating conditions under which followers can thrive and remain true to their underlying values, which should ultimately result in better performance and well-being among employees.

Leaders are in a unique position to influence the identities, well-being, and performance of those they supervise. Much prior research in the area of leadership has focused on ways in which leaders elicit optimal performance in followers as

a function of particular traits or employing certain behaviors in different types of situations. The recent wave of interest in transformational and charismatic leadership emphasizes the importance of leaders being able to connect in important ways to the values of followers and instilling in them the motivation to persevere in the face of obstacles for the good of the group. However, authentic leadership really represents an approach to leadership that explicitly emphasizes the importance of moral character on the part of the leader in allowing employees to thrive at work. Future work along these lines will be necessary to completely utilize the principles of positive psychology in the field of leadership.

SEE ALSO: ► Authenticity ► Organizational psychology  
 ► Positive organizational behavior ► Positive organizational scholarship  
 ► Transformational leadership

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## Learned Optimism

Amy C. Fineburg

*Spain Park High School/The University of Alabama*

*Learned optimism* is a phrase coined by Martin Seligman, to describe the process of adapting one's explanatory style toward a more optimistic orientation. An optimistic explanatory style is the opposite of a pessimistic explanatory style. A pessimistic explanatory style has been shown to predict depression in children and adults. Seligman, in his 1992 book entitled *Learned Optimism*, suggests that an optimistic explanatory style can be learned if one currently uses a pessimistic style. If pessimism can be altered by using strategies that promote an optimistic orientation, then the strategies for learning optimism can be a treatment for depression.

The concept of pessimistic explanatory style evolved from original research conducted by Seligman and Maier in which they explored the behavior of dogs who experienced uncontrollable situations and gave up avoiding aversive stimuli. Subsequent research demonstrated that dogs taught mastery over aversive stimuli did not later become passive when exposed to inescapable shock. As this research evolved, patterns of explanatory style in humans became evident based on the learned helplessness model of depression, reformulated by Abramson, Seligman, and Teasdale. The reformulated learned helplessness model of depression proposes that people will attribute helplessness in the face of uncontrollable circumstances to a particular

cause. People then determine whether the cause will have a chronic, broad, detrimental impact to future self-esteem and agency. The explanatory style patterns of people in studies of learned helplessness fall along three dimensions – global/specific (projection of cause across different situations), stable/temporary (projection of cause across time), and internal/external (projection of cause to internal traits versus external factors). Researchers eventually categorized optimists and pessimists as having diametrically opposed explanatory styles of good and bad events. For example, if an optimistic student received a bad test grade, then the test grade is viewed as not reflective of her ability in other classes (specific), independent of future test opportunities (temporary), and likely to be caused by inefficient study habits (external). For a pessimistic student, the test score is explained as reflective of overall student ability (global), predictive of future test opportunities (stable), and due to personal flaws – inability to understand material, etc. (internal). Pessimistic explanatory style seems to have an impact on the incidence of depression, and by extension, lower academic achievement. Seligman proposes that the explanatory style theory of optimism provides pessimistic people with an avenue to alter their pessimistic thinking patterns to be more optimistic, thus fostering mastery and resilience. Studies with middle-school children seem to show that retraining pessimistic thinking into optimistic thinking can significantly reduce incidence of depression.

Explanatory style research is similar yet distinct from two other lines of research. The first is attribution theory, championed by Bernard Weiner. Weiner's attribution theory seeks to explain people's behavior in terms of how people attribute the cause of personal success and failure. Weiner has developed two strands of his theory, one intrapersonal and the other interpersonal. Intrapersonal motivations are mediated by several layers of causal attributions, beliefs, and consequences. People use specific information from the past along with their own personal points of view about a situation. People also assess their achievement and personal attributes to determine if the goal can be achieved. People then determine whether the cause of the event is internal, stable, or controllable. All of these factors combine to determine whether a goal will be achieved or even pursued. Weiner's model is predicated on whether the goal is unexpected, negative, or important. If a goal is achieved, people do not spend the time determining cause. They simply remain happy. Unexpected outcomes lead to contemplation, which then lead to developing alternative action plans when the situation returns. Interpersonal motivations hinge on the attribution of responsibility for an action. If a person attributes responsibility to another for a controllable negative outcome, he or she will become angry and seek retribution, retaliation, or condemnation or neglect the responsible party. If the person attributes a lack of responsibility for a controllable negative outcome, sympathy will be the predominate emotion leading to helping others. Weiner's theory closely ties to Seligman's explanatory style theory of learned optimism. While Weiner's theory activates only when a negative outcome is experienced, Seligman's theory explores how both good and bad outcomes are explained. Seligman's theory more directly follows a positive

psychology paradigm since it focuses on both good and bad outcomes rather than just negative ones. Another area of departure between Weiner and Seligman involves the internal/external attribution of cause. Weiner discusses lack of effort as an internal, unstable dimension of behavior. Therefore, if a person attributes a failure to lack of effort, he or she will experience lowered self-esteem. The expectation of success in the future is not decreased, but feelings of guilt are increased. Seligman discusses lack of effort as an external, unstable component that shields the person from negative feelings about failure. Therefore, if a person explains failure due to lack of effort, he or she will not have a lowered self-esteem since future effort can be modified to ensure success. The feelings of guilt in Weiner's theory are contrasted by feelings of empowerment in Seligman's theory for the same outcome. The distinctions between these two theories are still being explored.

A second line of research related to learned optimism is *dispositional optimism*, coined by Scheier and Carver. Dispositional optimism is a trait referring to generalized expectancy outcomes that determine whether people will continue to work toward a goal or give up. Scheier and Carver's research focuses on general rather than specific expectations since people do not have advanced knowledge of specific stressors and experience general stress in life over time. Scheier and Carver study how an optimistic orientation, a belief that good things will happen in general, affects physical well-being. Their research has shown that people with dispositional optimism recover more quickly than those who expect bad things happen to them. This line of research is similar to Seligman's learned optimism in that both use similar terminology and explore the relationship between optimism and physical health. Seligman and Scheier and Carver deviate in their respective definitions of optimism and whether or not it can be adapted. Seligman proposes that explanatory style is learned and malleable, whereas Scheier and Carver advocate that optimism is dispositional and stable. The distinctions between these two uses of the term optimism need to be further explored. Both constructs reveal health and psychological benefits, but the mechanisms that lead to those benefits are quite distinct. Whether Seligman's learned optimism and Scheier and Carver's dispositional optimism are different concepts or different aspects of the same concept is still unclear.

Several studies show the impact of pessimistic explanatory style when people are presented with failure. Seligman and Schulman demonstrated that optimistic insurance salespeople were more likely to stay in the field longer than pessimistic ones. Seligman, Nolen-Hoeksema, Thornton, and Thornton gave varsity collegiate swimmers false failure feedback regarding their performance in practice races. Optimistic swimmers subsequently performed better (by swimming faster than expected) whereas pessimistic swimmers demonstrated decreased performance (by swimming slower than expected). Martin-Krumm, Sarrazin, and Peterson provided false failure feedback to middle-school students during a basketball dribbling activity. Optimistic students were less anxious, more confident, and performed better than their pessimistic counterparts. Optimists also view past failures differently than pessimists. Sanna and Chang found that optimists used retroactive pessimism to make past failures seem inevitable. While viewing failure as inevitable is

an explanatory technique of pessimists, optimists used easily generated external reasons for past failure as a means to inoculate them from the sting of failure. Even though the failure was viewed as unavoidable, the reason for the inevitability was not due to internally controlled circumstances. Overall, optimists tend to regard failure as a challenge to overcome rather than an obstacle to crumble before.

Several lines of research reveal explanatory style's relationship with the diathesis-stress model of depression. In the diathesis-stress model, pessimistic explanatory style comes into play with depression only when people experience negative life events. Life stressors and pessimistic explanatory style interact to bring about the onset and maintenance of depressive symptoms. Research indicates that explanatory style may not play as significant a role in one's behavior without the presence of a stressor, such as failure.

Current emphasis on applying the benefits of learned optimism focuses on developing interventions that help those at risk for depression via a pessimistic explanatory style. The most extensive examination of the impact of learning an optimistic explanatory style is the Penn Resiliency Project (PRP), lead by Jane Gillham and Karen Reivich and detailed in the book *The Optimistic Child*. For more than a decade, the PRP has examined how certain cognitive-behavioral strategies affect school-aged children who are at risk of depression. Students were assigned to the PRP or a control intervention program typically offered by the school. PRP students were taught such strategies as identifying negative beliefs, using evidence to contradict pessimistic explanations, being more assertive, negotiating through conflict situations, and being more relaxed when anxious. Students in PRP were half as likely to report moderate to severe depressive symptoms after two years in the program. In recent years, the PRP program has expanded to include training parents to use optimistic explanations in their own lives, which will help their children continue with a learned optimism orientation after the school-based interventions end. Seligman contends that a child's explanatory style mirrors the mother's style, so parent-focused interventions should augment school-based interventions and further decrease depression in children.

Research into learned optimism faces methodological issues. The Attributional Style Questionnaire (ASQ) is the primary assessment tool to determine explanatory style. The ASQ is a self-report measure, which can fall victim to demand characteristics in which people do not respond truthfully for a variety of reasons. While the ASQ yields reasonably high internal reliability scores, separate scores for optimism and pessimism are not easily parsed from the single instrument, making it difficult to determine the relative importance of optimistic and pessimistic styles separate from each other. Peterson and Barrett developed an Academic ASQ (AASQ) that presents more academically based situations to be used with collegiate populations. Altering the original ASQ to fit particular domains of experience seems to yield more accurate assessments of explanatory style in different situations, although these claims need further validation. Finally, the role of an optimistic style in success needs to be clarified. Some studies seem to indicate that pessimistic students might actually perform better than their optimistic

counterparts. This conundrum needs to be explored further to determine the exact role of optimism in a successful life.

SEE ALSO: ► Attribution theory ► Optimism ► Resilience  
► Seligman, Martin

## Life Coaching

Carol Kauffman<sup>a</sup> and Jordan Silberman<sup>b</sup>

<sup>a</sup>*Harvard Medical School*; <sup>b</sup>*Children's Hospital of Philadelphia*

Life coaching is a partnership through which coaches help clients to achieve goals, overcome challenges, and enhance well-being. While the purpose of therapy is to heal the patient, the purpose of coaching is to help the client design and live the best life possible. Coaches work with individuals, couples, or groups and interact with clients through face-to-face meetings, telephone conversations, or Internet discussions. The coaching field has been called a “natural home” for positive psychology (PP) because it provides an ideal medium for applying the principles of positive psychological science.

In recent years, coaching has changed both in its popularity and in the extent to which it is based on empirical evidence. The number of professional coaches and coaching clients has surged; tens of thousands of people now make their livings as coaches, or integrate coaching practices into their professions. Many of the early coaches began their work by using interventions that, although potentially effective, were not empirically tested. The life coaching field emerged from the human potential movement, and, when the field was younger, successes were often self-proclaimed or based on unrepresentative anecdotal accounts. As the profession moves from the first to the second generation of practitioners, it is outgrowing its dependence on gurus and focusing more on reliable, rigorous, scientific evidence. A recent definition of coaching psychology suggests that it is “grounded in established adult learning or psychological approaches,” alluding to the scientific underpinnings that are becoming an increasingly integral part of coaching practice (Palmer & Whybrow, 2005, p. 7). The transition to a more evidence-based paradigm, in fact, has come to fruition in the newly-defined sub-field of PP coaching. After providing an orientation to coaching, this article will discuss how the field can be enhanced by assessments, theories, and interventions that have been developed through the science of PP.

### Life Coaching: A Brief Introduction

Life coaching involves more than just achieving goals. Clients develop awareness of their values and aspirations through coach-guided and self-directed learning

processes, and strive to transform their lives such that their daily activities reflect these values and aspirations. The coaching process also involves overcoming challenges by applying strengths, improving work performance, and enhancing psychological well-being.

An effective coaching relationship is essential to achieving these aims. Gable and Haidt (2005) have defined PP as “the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions” (p. 104), and a solid coaching relationship is one example of a condition that helps people to flourish. While medicine and psychotherapy use a hierarchical “expert model,” coaching utilizes an egalitarian, “coactive” model. Coach and client “design a relationship” that serves the client’s ultimate agenda. Designing optimal coaching relationships, and using these relationships to provide outstanding coaching, requires that coaches develop competencies including: active listening, powerful questioning, creating awareness, designing actions, goal setting, and managing accountability.

A typical coaching session might include a lively dialogue designed to heighten awareness of core values, identify goals, assess how realistic those goals are, and explore gaps between who the client is and who he or she would like to become. The client-coach dyad (or group) might then develop multiple strategies for achieving goals and narrowing the aforementioned gaps. They would likely create specific learning or action plans, and then use mechanisms like cocreated accountability to ensure adherence to these plans.

Coaching sessions can be highly energizing, both for the client and for the coach. Although it has not demonstrated empirically, our experience suggests that the positive affect arising from coaching sessions often ignites an upward spiral. The increased positive affect that clients tend to experience often leads to a broadening and building of their thought-action repertoires, which may in turn help clients to achieve goals, overcome challenges, and perform more effectively. If achieving goals, overcoming challenges, and improving performance further increase positive affect, an upward spiral can ensue.

The processes of life coaching are highly concordant with the fundamentals of positive psychology. Both fields focus on core values, intrinsic motivations, and strengths. Interventions developed within positive psychology, like those developed within coaching, are intended to amplify self-efficacy, positive affect, hope, flow states, life satisfaction, and well-being. Both fields, of course, focus on more than just correcting deficiencies.

## **Positive Psychology Assessment, Theory, and Intervention**

Incorporating PP into coaching involves thoughtful and ongoing assessment of clients, application of continually-evolving theory and research, and careful application of novel interventions. Scales developed within PP can be used to assess clients at baseline, and to monitor the effectiveness of the coaching process, as



accurately as possible. Although psychological assessment might seem simple when first glancing at surveys, psychometrics is a complex science. Instruments that are applicable to coaching include the Steen Happiness Index, the General Happiness Scale, the Satisfaction with Life Scale, the Meaning in Life Questionnaire, the Positive and Negative Affect Schedule, and the Values in Action Institute Signature Strengths Questionnaire. A comprehensive catalogue and description of these assessments is outside the scope of this work, and more information on PP assessment is available elsewhere within this volume.

Many of the theories developed within PP – and the empirical findings associated with these theories – can also guide the coaching approach. Seligman’s view of happiness, for example, may reveal which areas of life coaches should focus on to help clients achieve greater life satisfaction. Evidence suggests that satisfaction with life is associated more strongly with engagement and meaning than it is with positive emotion, so a coach seeking to increase a client’s life satisfaction might focus on interventions that bolster engagement and meaning. C. R. Snyder’s theory of hope suggests that, in order to increase clients’ hopefulness, it may be useful to identify specific actions that can move clients closer to their goals, and to bolster clients’ beliefs in their abilities to carry out those actions. Other theories that may inform and enhance coaching practice include Csikszentmihalyi’s theory of flow experiences, Lyubomirsky’s theories regarding the determinants of sustained happiness, Fredrickson’s broaden and build theory of positive emotions, and numerous other PP theories.

Based on these theories, positive psychologists have developed interventions that can be invaluable for improving the coaching process. These interventions can be categorized into those that focus on increasing positive emotion regarding the past, present, and future; those designed to make individuals more engaged in their work and personal lives; and those that make life more meaningful. The *Gratitude Visit*, for example, involves connecting with positive emotions about the past (i.e., gratitude directed toward somebody who has helped you), by writing a letter of gratitude to a person who has made a difference in your life, and then reading the letter to the “gratitude recipient.” Bryant and Veroff’s *Savoring* interventions involve cultivating deliberate conscious attention to pleasant experiences in the present through techniques like sharing experiences with others and sensing without thinking. King, Lyubomirsky, and others use the *Best Possible Future Self* intervention that requires that people envision and write about their “ideal selves” in the future. In addition to increasing positive affect, this intervention may help to cultivate positive cognitions and optimism. Seligman has also developed numerous *learned optimism* techniques that help bolster positive emotion regarding the future. McDermott and Snyder’s *Making Hope Happen* program is an intervention that helps people increase levels of hopefulness regarding future events.

Other interventions serve to enhance well-being by increasing the capacity to fully engage in activities. Creating the conditions that facilitate *flow* (e.g., a balance of challenge and skill, clear goals and feedback, etc.) in work can be harnessed to help people achieve greater engagement, and can also improve performance.

Identifying and applying signature strengths can also be used to recraft work in order to help people feel more engaged.

Finding meaning is highly associated with well-being, and involves activities that make the world a better place. Seligman (2002, p. 263) suggests that meaning is most likely to ensue from “using your signature strengths and virtues in the service of something much larger than you are.” One might, for example, apply the strength of creativity to design interventions that help people lead happier lives. There are also more extensive systems that combine many PP interventions in organized and synergistic ways, such as Well-Being Therapy and Quality of Life Therapy. These are a few of the many empirically-validated PP interventions that are applicable to coaching.

## The Future of Positive Psychology and Coaching

While positive psychology has elucidated many ways that coaches can work more effectively with clients, fundamental questions remain. How can clients best be matched with coaches? How can PP interventions be matched with unique clients under unique circumstances? When should clients seek psychotherapy rather than coaching, and when should psychotherapists refer their clients to a coach? How can scientist-coaches best be trained to apply the science of PP? Continued PP research will probably reveal some answers to these questions, and provide more assessments, theories, and interventions to apply within coaching contexts. As positive psychologists continue to broaden and improve the repertoire of tools that can be applied by coaches, the collaboration between PP and coaching will develop into a more mutually-beneficial partnership that will further enhance coaches’ capacities to transform the lives of their clients.

SEE ALSO: ► Character strengths (VIA) ► Gratitude ► Hope  
► Positive emotions

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## Life Satisfaction

Rich Gilman,<sup>a</sup> Scott Huebner<sup>b</sup> and Matt Buckman<sup>a</sup>

<sup>a</sup>University of Kentucky <sup>b</sup>University of South Carolina

Life satisfaction (i.e., cognitive evaluation of one's life based on self-selected standards) is one of the key components of happiness. The concept of happiness has shaped the thinking of some of the most influential writers. Philosophical, religious, and political treatises such as Aristotle's *Nichomachean Ethics*, Augustine's *The Happy Life*, and even the United States' *Declaration of Independence* contend that the pursuit of happiness is the ultimate goal of human existence, with the attainment of any other goal merely a means to this end. However, in spite of its prominence in the lay literature, scientific study of the nature and determinants of happiness has only recently begun.

Collectively, research indicates that happiness is not a unidimensional entity, but rather consists of frequent positive affect (emotions), infrequent negative affect and life satisfaction. Given that the affective and cognitive elements are related, albeit separable, researchers prefer the term *subjective well-being* rather than the more colloquially derived term "happiness" to reflect its multidimensional nature. It is also recommended that the components of subjective well-being be investigated separately because they have different correlates.

Life satisfaction reports incorporate objective standards such as relative income, employment status, and availability of environmental resources with more subjective impressions such as current mood states, attitudes, goals and expectations. Given the multiple standards that may be used by individuals, most studies have examined life satisfaction from a global perspective. This perspective assumes a "top-down" approach in which mean global scores presumably reflect individuals' perceptions of their life quality after taking all relevant life domains into account (e.g., relations with others, quality of living environment, etc.).

A number of important characteristics are related to life satisfaction. For example, life satisfaction judgments appear to be relatively stable, yet sensitive to change, thus facilitating researchers' abilities to monitor differences over time and in response to various life events. Further, and perhaps most important, life satisfaction is not simply a by-product of life events, but influences important life outcomes. For example, life satisfaction has been shown to predict interpersonal, educational, and vocational success as well as mental and physical health among adults. Life satisfaction has also been shown to be negatively associated with multiple risk behaviors in adolescence, including alcohol and drug use, sexual risk taking, aggressive behavior, victimization, and unhealthy eating and exercise behavior. Although differentiated from measures of psychopathology, levels of life satisfaction predict how some individuals respond to psychosocial interventions, suggesting that the construct, traditionally of interest primarily to basic science researchers, may be of import to clinical professionals (e.g., applied psychologists) as well.

Life satisfaction assessments have been used as part of the evaluation process across a variety of psychosocial, educational, and medical settings. Two of the most frequently administered measures in this regard are the *Satisfaction with Life Scale* (SWLS), which contains five items is appropriate for adults, and the *Students' Life Satisfaction Scale* (SSLs), which contains seven items and is appropriate for school-age children and adolescents. Both of these global measures yield strong psychometric properties, including high internal consistency and solid evidence of construct validity. However, global reports only partially explain variance within specific life domains. Thus, recent studies have incorporated domain-specific measures, which assume a "bottom-up" approach in which analyses of specific domains provide a differentiated analysis of factors that contribute to an individual's overall or general sense of satisfaction. Domains have been chosen based upon the age of the respondents, weightings of their importance, and the nature of the research questions. Examples of multidimensional life satisfaction measures for adults and youth can be found in works by Robert Cummins, Michael Frisch, and the current authors. As with global measures, multidimensional life satisfaction measures have demonstrated acceptable reliability and validity across a variety of ages and populations.

## Correlates of Life Satisfaction

The origins of individual differences in life satisfaction have traditionally been studied by examining objective indicators such as income level, marriage status, gender, and nation of origin. Nevertheless, objective indicators together account for less than 20% of the variance attributed to life satisfaction. For example, level of income appears most strongly related to life satisfaction among countries suffering from exceedingly high rates of poverty and/or violence, but becomes less salient as per capita income increases. Based on Maslow's hierarchy of needs, it may be that once basic needs are met through stronger purchasing power and increased modernization, the effects of additional income become negligible, at least insofar as comparisons across nations are concerned. Nevertheless, within group analyses also reveals similar findings. Life satisfaction ratings also appear invariant as a function of gender and age, although the relative importance attributed to specific life domains differs depending on the age of the respondent.

Life satisfaction is less influenced by acquisition of material goods or social status (e.g., extremely wealthy or moderately comfortable, married vs. single); it is more influenced by persons' perceptions of their life circumstances. For example, it is not the amount of money that one makes but rather the perception of financial security or control that influences satisfaction; likewise, simply being married has less to do with one's satisfaction than the perceived quality of the marriage. Such cognitions are often related to dispositional characteristics, such as personality and temperament. For example, extroverted individuals who maintain

positive self-efficacy beliefs report higher life satisfaction than individuals who are predisposed to emotional instability (neuroticism) and poor self-efficacy. Research with twins also reveals that a significant portion of life satisfaction may be genetically determined. The extant literature thus suggests that life satisfaction reports are determined by multiple factors, including individual (e.g., genetics, personality, cognitions) and environmental factors (interpersonal relationships, cultural differences).

### **Current Emphasis on Life Satisfaction: The Homeostatic Set Point**

One of the more recent findings in life satisfaction research is that contrary to public opinions, most people report a moderately high level of satisfaction regardless of nationality, group membership, or life circumstance. These findings, taken together with the genetic studies, suggest evidence for a homeostatic “set point,” which for most individuals is likely located at the positive end (i.e., above the neutral point) of the spectrum. Although much work remains in this area, a positive set point makes evolutionary sense given that it creates a background against which negative events are quickly perceived and addressed. Further, maintaining a positive set point allows the individual not only to be in a position to secure basic (food, shelter) and secondary needs (social support, relationships, etc), but also is fundamental to goal seeking, creativity, and adaptive coping behaviors, all of which are necessary for optimal functioning. Departures from the positive set point thus signal difficulties adapting to life experiences.

Although life satisfaction may in part be genetically determined, it can and does change in response to environmental context. Recent studies have shown that life satisfaction reports vary in response to significant fluctuations in perceived quality of marriage and employment, the amount of time spent in productive activities, and the types of goals that individuals choose to pursue. Should these perceptions or activities change, satisfaction reports change as well—at least in the short run. Indeed, studies of individuals experiencing many different types of negative life events show that life satisfaction reports plunge immediately following the event, but rebound for most individuals, often within a period of a few months. However, studies also show that life satisfaction can remain lower for years after some events, such as being laid off from work, experiencing the death of a spouse, or becoming disabled. Thus, the set point is sensitive to life circumstances rather than fixed, with various intrapersonal (e.g., coping styles, personality characteristics) and interpersonal (e.g., availability of social support) resources moderating the extent of change and time needed to return to baseline levels.

The existence of individual differences in life satisfaction and the variability of life satisfaction reports across time and circumstances suggest research and clinical implications. For example, Diener has argued persuasively for the development of national and international indexes of well-being (including life satisfaction) so

that the effects of real time events occurring within and across nations and groups can be monitored. One such ongoing multinational database has provided a number of public policy implications, such as how a nation's fluctuations in economic, social, and political structures impact perceived livability and life quality among its residents. Life satisfaction research has also yielded promising clinical implications. Research with adults and youth indicates that individuals who maintain very high levels (upper 20% of the distribution of scores) of well-being (including life satisfaction) manifest a number of psychosocial benefits relative to individuals reporting average or low levels. These studies suggest that life satisfaction yields incremental advantages that may not be found even among individuals with average levels, thus serving as a key component of optimal functioning or "flourishing" among adults and youth. These studies also support calls for establishing interventions to enhance the life satisfaction of *all* individuals, not just those experiencing distress. Although clinical interventions specifically aimed at improving life satisfaction have been sparse, several interventions have yielded promising results. As the study of life satisfaction continues to be of interest to applied psychologists, it is anticipated that additional interventions will be formulated and empirically tested.

Given the wide range of correlates of life satisfaction, the usefulness of life satisfaction is apparent. Life satisfaction measures typically reflect the full range of subjective experiences, for example, from "terrible" through "delighted," allowing differentiations at the upper levels of the positive range. Researchers also have studied life satisfaction with respect to specific domains, especially satisfaction with work among adults and satisfaction with schooling among children and youth. Studies of the differential antecedents and consequences of life satisfaction differences in various domains are likely to reveal exciting new avenues for research and applications of life satisfaction research. Life satisfaction research thus promises to play an increasingly important role in the evaluation of planned and unplanned personal and environmental changes and their effects upon the quality of life of individuals and groups.

SEE ALSO: ► Diener, Ed ► Positive emotions ► Well-being

## Locus of Control

Cecil Robinson<sup>a</sup> and Sage Rose<sup>b</sup>

<sup>a</sup>University of Alabama; <sup>b</sup>Hofstra University

*Locus of control* is a generalized expectancy about underlying causes of events in a person's life, specifically, whether causes of events are *internal* and influenced by personal action, or *external* and influenced by outside forces such as luck, fate or other people. Individuals with an internal locus of control tend to *take control* of their actions and make necessary changes to deal effectively with new life experi-

ences. Several decades of research indicate internal control has positive benefits for many areas of one's life including increased physical and psychological health, achievement motivation, and subjective well-being. The research literature contributing to these findings is voluminous and spans many areas of psychology including clinical psychology, counseling psychology, educational psychology, health psychology, organizational psychology, psychology of religion and sports psychology. Further, the concept of control has formed the historical foundation for, or is related to, a number of many other well-known psychological constructs such as causal attribution, explanatory style, hope, learned helplessness, optimism, self-determination, self-efficacy, and self-handicapping.

The concept of locus of control has its roots in social learning theory and can be traced to research in the 1950s on typical and atypical expectancy shifts. It was made popular in 1966 by Julian Rotter through the publication of the classic locus of control scale in *Psychological Monographs*. Rotter posited that people with an internal locus are more likely to change their behavior after positive and negative reinforcement than individuals with external control perceptions because they believe they have control over the reinforcements and make the necessary changes in their behavior to affect the reinforcements. People with an external locus are less likely to change their behavior because they do not believe changes would affect the reinforcements, and instead attribute the reinforcements to chance, fate, God, or other people. Consider two students who do poorly on an exam. When asked how to improve performance on an upcoming exam, the first student responds, "I need to study harder." The second student responds, "I don't know. I was unlucky on a lot of questions." The first student demonstrated a response typical of people with an internal locus of control; their actions can influence future outcomes so they modify their actions (increase time studying) to achieve their desired outcome (better performance on an exam). The second student demonstrated a response typical of people with an external locus of control; forces outside of their control affect outcomes (luck, or lack thereof) so there is nothing to do but hope for better luck next time.

It is important to note that the concept of locus of control is also situated within expectancy-value theory. In order to increase the likelihood for reinforcements to result in behavior change, the reinforcement must be of value to the person. For example, if the first student from the previous example did not value academic success, then there is less likelihood that he or she will change behavior (e.g., study habits) to do better on future tests. Although the first student attributes poor grades to study habits (a behavior within one's control), he or she is not motivated to change study habits because grades are not of particular personal value.

## **Characteristics of Internal versus External Locus of Control**

There is a large empirical research base about differences between individuals with internal and external locus of control. In general, research indicates that an

internal locus of control is more desirable than an external locus of control. Individuals with internal control are more likely to have higher achievement motivation, tolerance for ambiguous situations, the ability to delay gratification, and the ability to resist coercion. Internal locus of control is also a buffer against self-handicapping, where individuals externalize failure by creating impediments that may explain or excuse the failure.

Internal locus of control is also positively related to subjective well-being (SWB). For example, college students with an external locus of control had lower levels of SWB than students with internal control. This relationship appears to continue across the lifespan, as additional research indicates that internal control is linked to increases in subjective well-being and positive affect throughout adulthood up to 90 years of age.

Internal control is also positively related to increased health. Examples of this relationship are evident when someone is trying to quit smoking, lose weight, is struggling with alcohol, or has arthritis, migraines, cancer, diabetes, and heart, kidney or lung disease. One example of this research examined the degree of perceived control that white male alcoholics and white male nonalcoholics had over future life events. Even though both groups had similar backgrounds and recent life experiences, alcoholics attributed less personal control over events than nonalcoholics. Alcoholics also attributed less control to themselves than to others, whereas nonalcoholics attributed more control to themselves than to others. Further, alcoholics who attributed less control to themselves than to others failed to complete treatment more frequently than alcoholics who attributed more control to themselves.

In business, leaders of companies (e.g., president, chief executive officer, chairperson of the board) tend to have greater internal locus of control. Within companies, workers with internal locus of control who are dissatisfied with their jobs are more likely to take action so that they can change jobs rather than talk about changing jobs.

Although much research demonstrates the benefits of internal control, research indicates that it is important that locus of control not be reduced to the simplistic model that internal is good and external is bad. There are instances when an internal sense of control may not be desirable. For example, individuals with internal locus of control can be less willing to take risks or work on self-improvement. Further, an individual with internal control who does not have the competence or opportunity to experience control needs to have a realistic sense of his or her influence or else can become neurotic, anxious and depressed.

## **Unidimensional versus Multidimensional Characteristics of Control**

Rotter characterized locus of control as a unidimensional construct. That is, if a person has high internal control, then he or she by definition also has low external control. The notion that locus of control is a unidimensional construct has been



challenged. Hanna Levenson proposed three independent dimensions: internal-ity, chance and powerful others. Levenson treated chance and powerful others as separate external dimensions because external belief in more powerful others may reflect an accurate appraisal of a social or political situation, and highlights that external beliefs are not necessarily dysfunctional.

Attribution theory also challenges locus of control as a unidimensional construct. Attribution theory posits there are three causal properties to explanations of successes or failures: internal-external, stable-unstable, and controllable-uncontrollable. In attribution theory, locus and controllability are separate constructs because there are instances when an individual may attribute internal, but uncontrollable causes to events. For example, a student who thinks his or her ability affects school grades (internal), and that that ability is innate (uncontrollable) will likely not change his or her behavior to affect future outcomes. Innate ability is viewed as uncontrollable because a person cannot change genetics (it is stable). Attribution theory highlights the importance of control. Although an internal locus is still preferred, it is important to understand locus in relation to the stable-unstable dimension, and the effects of this relationship on the perceived controllability of the outcomes. Individuals who believe that they have *control* over aspects in their lives like academic achievement, physical illnesses, mental illnesses, and skill development, are more motivated and persistent, achieve at higher levels, and more likely to achieve goals than individuals with an internal locus without control.

Explanatory style, or attributional style, goes a step further than attribution theory by adding a global-specific dimension with the internal-external and stable-unstable dimensions. The global-specific dimension assesses whether an attribution affects all aspects of a person's life (global) or is limited to certain situations (specific). An example of a specific attribution is the student who attributes poor performance in math to math ability and has little control over future outcomes in math, but feels he or she has control over future outcomes in other subjects. An example of a global attribution is the student who attributes poor performance in math to an overall lack of academic ability. This student would not only feel he or she has no control in math classes, but in other academic areas as well.

## **Locus of Control and Other Psychological Constructs**

The central role of locus of control within past psychological research is evident in the way that it has formed a basis for and has been absorbed into other psychological concepts. Locus of control explains the development of learned helplessness. It is also a historical foundation for self-determination, or the need to have a sense of autonomy to control one's life. Much like an internal locus of control, self-determination increases the likelihood that one will feel intrinsically motivated to engage in or complete a task. Research on students' perceptions of personal autonomy versus outside control has found that personal control predicted academic engagement. Internal feelings of control produce deeper engagement and higher persistence at learning activities.

Internal locus of control is related to hope, which explains individual goal attainment through perceptions of pathways and agency. Lower levels of hope are related to the perception that external factors control one's life. Research exploring health locus of control and levels of hope in Taiwanese cancer patients indicated that patients who were aware of their own diagnosis reported significantly higher levels of hope than those who were not informed of their own diagnosis. Patients who were aware of their diagnosis tended to have higher levels of internal locus of control than those who were not informed. Having an internal health locus of control was positively related to levels of hope. Other research examining outpatients with ocular melanoma and head and neck cancer emphasized the importance of locus of control as either a direct determinant of hope or a factor that buffers distress and supports coping.

An internal locus of control is also related to self-efficacy, which is the expectancy of success when completing a task. Research examining job interview performance of graduating seniors indicated that locus of causality attributions for interview outcomes moderated the relationship between interview success and interviewing self-efficacy. Other research has investigated new measurements of locus of control to incorporate self-efficacy and to investigate its relationship with motivation and academic achievement.

## Current Issues and Research

An outstanding question for research, and largest methodological issue, is whether locus of control is best measured as a general or domain-specific expectancy. Research indicates that domain-specific measures of locus of control tend to be more predictive than domain-general measures, but it still remains an unresolved issue. Although research on the locus of control construct has waned since its heyday of the 1960s and 1970s, it is still a useful construct that is being used in conjunction with other constructs in research. Locus of control is being used in conjunction with constructs such as hope and self-efficacy to create models that better explain and predict behavior. Future research will likely continue the current trend and include locus of control with other constructs to examine ways to foster people's ability to take control of their lives and strive towards optimal physical and psychological well-being.

SEE ALSO: ► Attribution theory ► Learned helplessness

## Longitudinal Studies

Anthony D. Ong and Thomas E. Fuller-Rowell  
*Cornell University*

Longitudinal studies involve the collection and analysis of data over long periods of time. Unlike cross-sectional studies that only allow inferences about interindividual

differences, the longitudinal approach offers information on intraindividual change. Longitudinal studies make use of prospective designs. The simplest prospective design involves panel data, in which the same individuals are interviewed repeatedly across time. In the typical longitudinal panel design: a) data are collected at two or more points in time; b) the same sample of people is interviewed at distinct points in time; and c) data from the respondents are compared across these time points to monitor patterns of change. Although longitudinal panel designs vary with respect to the composition of the sample, the number of follow-up assessments, and the intervals between assessments, such designs have two defining characteristics. First, the same research participants, who constitute the *panel*, are measured at two or more points in time (the measurement periods or *waves*). Second, at least one variable is measured at two or more waves. This is the longitudinal aspect of the data, which allows the measurement of qualitative or quantitative change within individuals from one wave to the next. In contrast to the longitudinal panel design, *cross-sectional* designs involve the assessment of research participants at only one measurement point.

Beyond the basic panel designs, other longitudinal designs that illustrate the breadth of longitudinal research include the *cohort study* and the *repeated cross-sectional* design. Cohorts consist of individuals who experience a common set of significant life events within a particular period. A birth cohort, for example, designates those who are born within a similar period. In comparison to panel studies, cohort studies follow the same individuals over two or more points in time. In addition, whereas panel studies allow the researcher to account for individual change, cohort studies aggregate data across all members of the cohort. In the repeated cross-sectional design, the data for each assessment period is regarded as a separate cross-section and the major goal is to make comparisons across periods. The major disadvantage of the repeated cross-sectional design is its inability to study developmental patterns within a cohort and to examine causal relationships. However, this design enables the researcher to examine aggregate trends during one period and to replicate cross-sectional results across periods.

The advantages of longitudinal studies are many. They allow researchers to measure change within individuals, to identify precursors of intraindividual change, and to establish causal relationships between variables. Additional advantages to the longitudinal design include the collection of prospective (rather than retrospective) data, the elimination of information duplication (background demographic data, in particular, need to be collected only once and can save interviewer time and cost), the flexibility of adding new variables after the first data collection, and the accumulation of a large number of variables, often not possible in cross-sectional designs. Finally, collection of data on individuals at three or more points enables powerful statistical modeling techniques.

One of the major goals of positive psychology is to determine factors that influence normal and optimal development. These factors may be fixed at a particular level (e.g., gender, ethnicity) or variable (e.g., physical health, emotions). Traditional statistical methods such as repeated measures analysis of variance cannot take

into account the time-varying nature of covariates. The most commonly used approach to modeling change in continuous variables that allow for time-varying covariates is *growth curve models*. Growth curve models, such as hierarchical linear models, fit growth trajectories for individuals and relate characteristics of these individual growth trajectories (e.g., slope) to covariates. Because these models typically involve repeated-measures data, longitudinal designs are the design of choice when fitting growth curve models. The individual growth trajectory can be expressed as

$$Y_{ti} = \beta_{0i} + \beta_{1i} x_{ti} + e_{ti}$$

for a linear model of growth.  $Y_{ti}$  represents individual  $i$ 's outcome score at time  $t$ , where  $t = 1, \dots, T$ ;  $x_{ti}$  represents the measure of time for individual  $i$ ; and  $\beta_{0i}$  and  $\beta_{1i}$  represent the intercept and slope, respectively, of linear growth for individual  $i$ . This is often referred to as the level-1 equation. The intercept and slope parameters are random effects; in other words, they may vary across individuals, as reflected in the need for the  $i$  subscript denoting individual. This leads to the level-2 equations:

$$\beta_{0i} = \gamma_{00} + u_{0i}$$

$$\beta_{1i} = \gamma_{10} + u_{1i}$$

Growth curve modeling is an appropriate technique for studying individual change because repeated measures can be considered as nested within individuals and can be represented as a two-level hierarchical model. At the within-person level, each individual's development is modeled as a unique growth trajectory. At the between-person level, the growth parameters of these trajectories become the outcome variables, which are then modeled as a function of person-level characteristics. Consider a growth trajectory of subjective well-being for individual A with intercept  $\beta_{0A}$  and slope  $\beta_{1A}$ . The level-2 equations state that individual A's intercept  $\beta_{0A}$  can be decomposed into two components: the grand mean of all the  $\beta_{0i}$ s for all individuals,  $\gamma_{00}$ , and  $\beta_{0A}$ 's deviation from this grand mean,  $u_{0A}$ . Likewise, individual A's slope  $\beta_{1A}$  can be decomposed into two components: the grand mean of all the  $\beta_{1i}$ s for all individuals,  $\gamma_{10}$ , and  $\beta_{1A}$ 's deviation from this grand mean,  $u_{1A}$ . Interindividual variability in intercepts is expressed in the variance of the  $u_{0i}$ s, and interindividual variability in slope is expressed in the variance of the  $u_{1i}$ s. It is possible to include predictors in addition to time (or even instead of time) in the level-1 equation, and to include time-invariant predictors in the level-2 equation.

Longitudinal studies are not without their methodological limitations, however. In addition to the time-consuming nature of longitudinal studies, the disadvantages of such designs include the possibility of selective sampling, participant survival and dropout, test-retest effects, and generation effects. These sources of error can affect the internal or external validity of the study. The first of these limitations

is selective sampling. Because of the repeating nature of participation in a longitudinal study, cohort or panel studies often are not representative of the full population. In addition, selective drop-out refers to the fact that individuals who have poorer physical or mental health, or who are less motivated, will be more likely to discontinue in the study. Because the variables of interest to the investigator often involve physical and mental health, selective drop-out biases the remaining sample with respect to the variables of interest. A third problem faced by longitudinal studies involves testing effects. Participants learn from the experience of being assessed at the first wave of a study, and may perform better, for example on cognitive tests, on subsequent occasions, or answer questions differently simply because they are familiar with the issues being studied. Finally, concern about generation effects as a source of error can threaten the external validity of the longitudinal study. Because of the nature of the longitudinal design, the age effect of the study is generation specific. Findings from the longitudinal study represent results only for the age of individuals in the study and cannot be generalized to other age groups.

SEE ALSO: ► Change (stages of) ► Successful aging

## Lyubomirsky, Sonja

Ryan T. Howell

*San Francisco State University*

With publications focused on the topics of rumination, subjective happiness, and the mechanisms and benefits of positive emotions, Sonja Lyubomirsky's career substantially contributes to the growing science of happiness. Lyubomirsky began her academic career as an undergraduate at Harvard University (1989) where she received her AB *summa cum laude*. At Harvard, she was awarded the Faculty Prize for Outstanding Honors Thesis for the Department of Psychology (1989). She also received the prestigious National Science Foundation Graduate Fellowship (1989–92) to support her doctoral work in social psychology at Stanford University. After graduating from Stanford (1994), she began an appointment as Assistant Professor of Psychology at the University of California, Riverside, where she has continued to flourish as a leader in the field of positive psychology. Currently, her research attempts to answer three questions: 1) What makes people happy? 2) Is happiness a good thing? and 3) How can we make people happier still?

## What Makes People Happy?

To answer this question, Lyubomirsky has developed the influential construal theory of happiness. This proposes that to understand why some individuals are

happier than others, we must understand the thoughts, goals, and behaviors that maintain happiness. For example, Lyubomirsky reports that chronically happy individuals construe life events and daily situations in ways that maintain their happiness, whereas the opposite is true of chronically unhappy individuals.

## **Is Happiness a Good Thing?**

Lyubomirsky and colleagues recently published a comprehensive review of all studies that focused on the relation between positive affect and successful life outcomes. The review included 225 studies and comprised over 275,000 participants and confirmed that happiness appears to benefit individuals, families, communities, and societies. Specifically, the benefits of happiness include higher incomes, higher quality of work, more satisfying and longer marriages, stronger social support, better physical health, lower stress, and longer life.

## **How Can We Make People Happier Still?**

Lyubomirsky is currently developing innovative interventions to aid individuals in sustaining and increasing happiness. The results of her most recent series of studies verified that three specific activities produced reliable happiness-boosting effects. Lyubomirsky and her colleagues found that expressing gratitude once a week, performing a wide variety of kind acts, and visualizing one's best possible self resulted in boosts in well-being for up to one month after the intervention.

Not surprisingly, Lyubomirsky's high-quality work has earned her several national awards and recognitions outside the academic community. In 2002, Lyubomirsky's research was recognized with a Templeton Positive Psychology Prize. Also, her research has been written up in dozens of magazines and newspapers. Further, she has appeared in multiple television shows, radio shows, and feature documentaries in North America and Europe. Her forthcoming trade book on happiness will be published in January 2008 by Penguin Press (North America) and by about a dozen foreign publishers.

SEE ALSO: ► Happiness ► Positive emotions ► Well-being

# M

## Marital Happiness

Frank D. Fincham  
*Florida State University*

Marital happiness is a judgment made by a spouse that indicates the sense of well-being or satisfaction he or she experiences in the marital relationship. Ever since changing social and economic conditions at the end of the nineteenth century prompted concern about the breakdown of the family, social scientists have sought to understand marital functioning. The two earliest studies in this domain were on sexual behavior (predating Kinsey by a decade) and both examined its role in marital happiness. The central status accorded happiness in this nascent research area gained the attention of researchers from a variety of disciplines, including psychology, sociology, family studies and communications. To this day, what has been variously labelled marital happiness, satisfaction, adjustment, success, companionship or some synonym reflecting the quality of the marriage remains the most frequently studied aspect of marriage. This focus is perhaps not surprising because the protective effect of a happy marriage for the mental and physical health of spouses, as well as the healthy development of their children, is well-documented.

Initially researchers, mostly sociologists, paid greatest attention to identifying demographic correlates of marital happiness using large-scale surveys (the *sociological tradition*) and went on to complement this effort by examining individual differences associated with marital happiness. In reviewing 50 years of this research genre, Nye (1988, p. 315) concluded:

early on [1939] . . . Burgess and Cottrell . . . took every individual characteristic they could think of and correlated it with marital success, producing an R of about .50. . . . Not a bad start, but we have not progressed much beyond that point in 50 years.

Not surprisingly, this approach was foregone when psychologists began to systematically study marriage in the late 1960s and 1970s. Efforts turned instead to focus on identifying observable interaction behaviors that might underlie marital happiness (the *behavioral tradition*). The findings of the extensive literature that emerged on the behavioral correlates of marital happiness can be summarized in terms of a simple ratio: the ratio of agreements to disagreements is greater than 1 for happy couples and less than 1 for unhappy couples. In addition, observational research documented that the behavior of happily married couples is less predictable (structured) than that of unhappy spouses who tend to reciprocate one another's (negative) behavior. Although seemingly obvious, such findings contradicted the long-standing belief that happy couples are characterized by a *quid pro quo* principle according to which they exchange positive behavior. Reliably both observed and self-reported behavior account for approximately 25% of the variance in marital happiness.

The limits of a behavioral account of marital happiness became apparent by the 1980s at which time attention began to focus on processes that might mediate the behavioral exchanges associated with marital happiness (the *mediational tradition*). One such process is affect and research on affect began to flourish (though study of marital happiness as affect never took root). A simple index of affect, for which considerable data already existed, was nonverbal behavior. For example, affect codes are more powerful than verbal codes in discriminating happy from unhappy couples and happy couples are distinguished from unhappy couples more by their relatively fewer displays of negative affect, rather than by more displays of positive affect. Other affect indices investigated include verbal reports and physiological measures such as autonomic nervous system activity during couple interaction. Happy couples score more highly on measures of affect-laden relationship beliefs, such as love, affection, trustworthiness and honesty. As regards physiological indices of affect, Gottman reports that greater correspondence in the physiological systems of spouses during interaction is inversely related to their marital happiness. However, contradictory findings showing greater correspondence among happy couples likely reflects the difficulty of obtaining reliable physiological data during spontaneous social interaction. Perhaps as a consequence promising hypotheses involving physiological data (e.g., that arousal prior to and during marital interaction predict later marital happiness) have not been supported upon further analysis.

Other potential mediators of behavior exchanges that underlie marital happiness are cognitive variables and they have also received considerable attention from marital researchers. Most frequently investigated is the association between attributions, or explanations for events, and relationship happiness, making it possibly the most robust, replicable phenomenon in the study of marriage. Happiness is associated with attributing negative relationship events (e.g., spouse arrives home late from work) to impermanent, specific causes located outside of the partner (e.g., s/he was delayed by traffic) and positive events to stable partner characteristics (e.g., personality traits). Alternative explanations for this



attribution–happiness association have been ruled out (e.g., depression) and these attribution patterns have been shown to not only predict responses to partner behaviors but also later levels of marital happiness as well as the trajectory of happiness over time. Marital happiness is also positively related to a number of other cognitive variables, including secure attachment models, smaller partner and ideal standards discrepancies, greater downward social comparison, memory biases that reflect negatively biased recall of the past (resulting in the belief that the marriage has improved), and self-evaluation maintenance processes that change the nature of couple communication and moderate responses to differences in decision making power.

## **The Need for Theory**

As noted, interest in marital happiness was initiated and facilitated by practical concerns and this may be why research on marital happiness has never been heavily theoretical. As Glenn (1990) points out in his decade review, most research is justified on practical grounds “with elements of theory being brought in on an incidental, ad hoc basis” (p. 818). The relative absence of theory has had unfortunate consequences. For example, Spanier eliminated items from his influential measure when they were positively skewed thereby assuming that items reflective of marital quality approximate a normal distribution. But such items may be less critical indicators or even irrelevant to marital quality if marital quality inherently involves skewed data because spouses tend to report happy marriages. Moreover, if the outcome predicted by marital happiness is itself skewed (e.g., aggression), then a skewed predictor may be best.

The disjuncture between theory and measurement has had important consequences. First, it is not clear what most instruments used to index marital happiness actually measure. Most frequently, measures comprise a polyglot of items (e.g., subjective evaluations, behavioral reports) and responses to them are not conceptually equivalent. Typically, an overall score is computed by summing over the items but it is not clear how such a score should be interpreted. Although this problem was identified in the marital literature over 45 years ago, it remains an issue. As a result, knowledge of the determinants and correlates of marital happiness includes (an unknown number of) spurious findings that reflect overlapping item content in measures of marital happiness and measures of constructs examined in relation to it.

In response to these concerns several scholars have argued that marital happiness is best conceptualized as subjective, global evaluations of the relationship. The strength of this approach is its conceptual simplicity as it avoids the problem of interpretation that arises in many omnibus measures of marital happiness. Because it has a clear-cut interpretation, this approach allows the antecedents, correlates, and consequences of marital happiness to be examined in a straightforward manner.

## **Emerging Themes**

### **One or Many Dimensions?**

The above conceptualization of marital happiness has not changed the operational definition of the construct as a single, bipolar dimension. Thus, marital happiness reflects evaluation of the marriage in which positive features are salient and negative features are relatively absent whereas unhappiness reflects an evaluation in which negative features are salient and positive features are relatively absent. This view has been challenged on the grounds that positive and negative evaluations can be conceptualized and measured as separate, though related, dimensions. Data obtained with a simple measure used to capture this two-dimensional conception of marital happiness indicate that the dimensions have different correlates and account for unique variance in reported and observed behaviors and attributions independently of individual affect and omnibus measures of marital happiness. This stands in stark contrast to the widespread view, supported by factor analytic approaches, that standard measures of marital happiness reflect a single underlying dimension.

### **Continuum or Category?**

A fundamental question that can be asked of many psychological constructs like marital happiness is whether they reflect underlying categories or an underlying continuum. Determining the underlying structure has important theoretical implications in pointing researchers towards linear vs. nonlinear models. Using recently developed taxonmetric procedures it has been shown that approximately 20% of recently married couples experience marriage in a way that may be qualitatively and not merely quantitatively different than their peers. Taxon and complement members also differed on a number of relationship variables and exhibited a different pattern of connections among marital variables.

### **Snapshot or Movie?**

An important new development is the notion that marital happiness is appropriately conceptualized not as a judgment made at a single time point but as a trajectory that reflects fluctuations in happiness over time. Growth curve analysis that allows trajectories to be computed for individual spouses and their partners is being used increasingly in marital research and rate of change in marital happiness is being examined in relation to other variables of interest. From this perspective, marital happiness at one point in time cannot be fully understood without reference to earlier or later data points.

### **Context Independent or Context Specific?**

The emergence of relationship science, that embraced the broader environmental context in which relationships exist, and an influential model of marriage, the

vulnerability-stress-adaptation model, has focused attention on the milieus within which marriages operate, including microcontexts (e.g., the presence of children, life stressors and transitions) and macrocontexts (e.g., economic factors, perceived mate availability). Accordingly, marital processes (and by implication happiness) are thought to increase in importance to the extent that the couple experiences stress and research on contextual or ecological factors in marriage has expanded dramatically in recent years.

## **The Future: Consummating the Marriage with Positive Psychology**

Concomitant with the rise of positive psychology as a new field of inquiry has been awareness that marital happiness is not simply the absence of unhappiness and an emphasis in public policy (at least in the USA) on “healthy” marriage. These developments have no doubt facilitated interest in larger meanings and deeper motivations about relationships, including a focus on constructs that are decidedly more positive. This has restimulated work on commitment in a marriage, a topic long emphasized but frequently overlooked in marital research. Equally important, it has introduced a number of constructs into marital research that are of particular interest to positive psychology.

A thriving literature on *forgiveness* in marriage shows that it is strongly related to marital happiness as well as several key constructs in the marital domain. Forgiveness can be seen conceptually as falling on a dimension of positive coping responses, like *social support*, another construct that is now receiving considerable attention. Not only is supportive spouse behavior related to current marital happiness, it also predicts less future marital stress, independently of conflict behavior.

In a related vein, *sacrifice* is beginning to emerge as a virtue in marriage. In the context of marriage, sacrifice refers to behavior in which one gives up some immediate personal desire to benefit the marriage or the partner, reflecting the transformation from self-focus to couple focus. Satisfaction with sacrificing for one's spouse is associated with both concurrent and later marital happiness, with attitudes about sacrifice predicting later happiness better than earlier marital happiness.

### **Viewing Marital Happiness through the Lens of Positive Psychology**

It is apparent that a marriage has occurred recently between research on marital happiness and constructs central to positive psychology. Equally apparent is that the marriage with positive psychology has not been formally declared, let alone consummated. However, the case for consummating this marriage is strong.

Viewing marital happiness through the lens of positive psychology has implications for a more complete understanding not only of relationships but of the human condition. Marital happiness has the potential to enhance functioning and not simply protect against dysfunction. But like psychology itself, marital research has

focused primarily on human dysfunction. What positive emotions, strengths and virtues correlate with marital happiness? As noted, the fledgling research relevant to this question is meagre indeed. Our inability to answer this question immediately points to the need to broaden the nomological network in which marital happiness is situated to include strengths and virtues.

Declaring and consummating the marriage with positive psychology has important practical implications and thus speaks to the motivating force that has propelled marital research. Specifically, programs designed to help couples should not be evaluated merely in terms of the prevention or amelioration of dysfunction (as is current practice) but also in terms of their ability to promote optimal functioning. How does the experience of marital happiness contribute to the good life? Indeed, the lens of positive psychology alerts us to an important but relatively unexplored issue pertaining to marital happiness, its meaning for the spouse. And, as Fincham, Stanley and Beach (2007, p. 276) point out, a focus on meaning sets the stage for “examination of transformative, rather than merely incremental, change in relationships.”

Consummating this marriage is equally important for positive psychology. The individualistic bias in the broader discipline from which it sprung is also evident in positive psychology. It is hard to conceive of a fully actualized positive psychology that does not include a central focus on intimate relationships like marriage. Humans are nothing if not social animals. There is much for each party to gain from this marriage. Let the consummation begin.

SEE ALSO: ► Family functioning ► Family quality of life

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## Maslow, Abraham

Sara K. Bridges<sup>a</sup> and Frederick J. Wertz<sup>b</sup>

<sup>a</sup>*The University of Memphis*; <sup>b</sup>*Fordham University*

Abraham Maslow (April 1, 1908–June 8, 1970) was one of the principal founders of Humanistic Psychology. He attended City College of New York and Cornell, before transferring to the University of Wisconsin where he earned his BA (1930),

his MA (1931), and his PhD (1934) in psychology. While in Wisconsin he studied with Harry Harlow before being hired by E. L. Thorndike at Brooklyn College where he worked for 14 years. World War II convinced Maslow of the importance of psychology's confrontation with human problems such as the achievement of world peace. While in New York, Maslow formed relationships with Adler, Horney, Fromm and others and developed his theory of human motivation from the observation that studying healthy individuals was more logical than studying sick ones. This theory led to the third force in psychology: A psychology of health and growth which was more comprehensive than psychoanalysis and behaviorism (Humanistic Psychology). In 1951, Maslow became the Chair of Brandeis' Department of Psychology and founded the *Journal of Humanistic Psychology* (first editor Anthony Sutich) in 1961 and the Association for Humanistic Psychology (first president James Bugental) in 1963. Maslow was president of the American Psychological Association in 1968, and founded the *Journal of Transpersonal Psychology* (first editor Sutich) in 1969.

Maslow is best known for his hierarchy of needs – a theoretical/psychological approach to motivation in humans. Maslow asserted that the needs represented by each level of the hierarchy (i.e., physiological, safety, love, esteem, and self-actualization) motivate behavior when they are not met. The first four (i.e., hunger, thirst, safety, esteem) are referred to as *D* or *Deficiency needs*, meaning that one will more keenly notice when these needs are not met than when they are met. Once these prepotent, lower levels are satisfied, one can focus on higher level *B* or *Being needs* (i.e., ideals, beauty, wisdom, creativity, truth, etc). Maslow posited that partial fulfillment of one level is sufficient to allow room for growth at the next and subsequent levels. The highest level of the hierarchy is self-actualization, a term first coined by Kurt Goldstein, that Maslow used to describe the desire to fulfill all that one has the potential to become. There are 15 characteristics of self-actualization, which requires both self-exploration and action. Maslow also studied the characteristics of “peak experiences,” which are seen as momentary self-actualizing events. Maslow developed the concept of Eupsychia, the form of social organization that facilitates psychological health applied in industrial–organizational psychology. In Maslow's humanistic vision, psychological science serves the highest human values by fostering individual fulfillment and world peace.

SEE ALSO: ► Actualizing tendency ► Humanistic psychology

## Mature Defense Mechanisms

Ana C. DiRago<sup>a</sup> and George E. Vaillant<sup>b</sup>

<sup>a</sup>University of Minnesota – Twin Cities; <sup>b</sup>Brigham & Women's Hospital, Harvard Medical School

There are three broad classes of adaptive mental mechanisms. First, there are the ways in which an individual consciously elicits help from appropriate others:

namely *seeking social support*. Second, there are *conscious cognitive strategies* that we intentionally use to make the best of a bad situation. Third, there are *involuntary mental mechanisms* that distort our perception of internal and external reality in order to reduce subjective distress. For semantic consistency the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) has labeled these mental mechanisms, *defenses*, and has organized them in a hierarchical Defensive Function Scale. Included within the “high adaptive level” of *DSM-IV* are the defenses: anticipation, altruism, humor, sublimation and suppression. These five adaptive mental mechanisms “maximize gratification and allow conscious awareness of feelings, ideas and their consequences” (APA, 2000, p. 752). They epitomize what is meant by positive transformations.

In many ways, the first two classes of coping are under volitional control, and therefore are of greater interest to psychology. In three ways, however, the involuntary defense or coping processes are superior to voluntary coping processes. First, they are independent of education and social privilege; second, they can regulate our perception of internal and external realities that we are powerless to change. Lastly, such processes can serve as transformative agents in the real world.

Adaptive involuntary coping mechanisms are essential to positive mental health. Defenses reduce conflict and cognitive dissonance during sudden *changes* in internal and external reality. If not modified, such sudden changes result in anxiety and/or depression. First, such mechanisms can restore psychological homeostasis by ignoring or deflecting sudden increases in affect. Second, such mechanisms can provide a mental time out to mitigate changes in reality and self-image, which cannot be immediately integrated – for example, after major surgery or promotion. Third, such mechanisms help cope with irresolvable conflict with important people, living or dead. Finally, these mechanisms soften conflicts of conscience – for example, after putting a parent in a nursing home. In short, defenses shield us from sudden changes in affect, reality, relationships or conscience.

For many years “defense mechanisms” have been deservedly unpopular in experimental psychology due to difficulty in empirical verification. Over the past 20 years, the idea of “involuntary” adaptation has reentered the literature of cognitive psychology under such rubrics as “hardiness,” “self-deception,” “emotional coping,” and “illusion.” Defense mechanisms are clearly as important in reducing anxiety from cognitive dissonance as they are in minimizing anxiety from conflict between conscience and impulse. In recent years experimental strategies for studying defense mechanisms have improved. Recently, the *DSM-IV* has offered a terminology, a glossary and a tentative diagnostic axis to provide a common language.

In order to overcome subjectivity, reliability of defense recognition requires objective longitudinal evidence. Using “triangulation” of real symptoms, autobiographical report and contemporaneously assessed biographical fact to measure invisible mental process is analogous to surveyors using triangulation to assess the height of mountains they cannot climb.

In nonconflictual situations, of course, the putative adaptive mechanisms of “sublimation,” “humor,” “anticipation,” “altruism,” and “suppression” seem quite conscious and voluntary. In highly emotionally charged situations, however, such deployment of these mechanisms can be transformative and surprisingly involuntary. A delinquent for the first time “counting to ten” (suppression) while consciously examining his anger rather than impulsively punching a policeman; a mother rehearsing affectively and realistically, rather than denying, the fact that her child is dying (anticipation); a survivor of child abuse rather than abusing her own children, working in a shelter for survivors of abuse (altruism) are such examples. Such behaviors emerge with maturation as delicate transformative mental balancing acts and not as a result of good advice and self-help cognitive strategies.

Adaptive or “mature” defenses (altruism, sublimation, suppression, humor, anticipation) are common among the mentally healthy and become more salient as individuals mature from adolescence to midlife. The association of mature defenses with mental health remains robust whether “health” is measured by subjective happiness, psychosocial maturity, occupational success, richness and stability of relationships or absence of psychopathology. Individuals with brain damage (e.g., alcohol dependence, schizophrenic relapse, multiple sclerosis) replace adaptive defenses with more maladaptive mechanisms most notably projection.

The prejudice of projection and tantrums of acting out appear to others as transgressions. In contrast, doing as one would be done by (altruism), a stiff upper lip (suppression), planning for the future (anticipation), the ability not to take one’s self too seriously (humor), and “turning lemons into lemonade” (sublimation) are the very stuff of which a positive psychology should be concerned. However, although closer to consciousness than defense mechanisms like projection and repression, mature mechanisms cannot be voluntarily deployed.

The transformative nature of each of five “mature” mental mechanisms can be elaborated as follows.

## **Altruism**

When used to transform conflict, altruism involves getting pleasure from giving to others what we ourselves would like to receive. For example, victims of childhood sexual abuse sometimes pathologically cut themselves (turn anger against the self), or abuse children (acting out) or use “neurotic” compromises such as becoming frigid (reaction formation). Alternatively, some victims work in shelters for battered women and in support groups or hotlines for abuse victims. Often, altruism is an adaptive outgrowth of the defense of reaction formation, a mechanism that can maladaptively make the subjects’ desires all bad and the needs of others all good. Using reaction formation, an ex-drinker who suddenly declares drinking as a filthy habit annoys his friends. Using altruism, the ex-alcoholic who serves as a sponsor to a new AA member achieves a transformative process enjoyed by giver and receiver.

## **Sublimation**

The sign of a successful defense is neither careful cost accounting nor shrewd compromise, but rather psychic alchemy. A member of a research study wrote, "I have twice the sex drive of my wife. We adjust ourselves by varying our sex play to suit each other. We believe that lovemaking should be practiced as an art!" Thus, sublimation allows an indirect resolution of conflict with neither adverse consequences nor marked loss of pleasure. Unlike the autistic fantasy of the child and schizophrenic, artists can peddle their most private dreams to others. In contrast, the mechanism of acting out – rape – dissipates the torrent of our unmodulated affect upon strangers, and reaction formation dams affect such expression completely.

## **Suppression**

Suppression (stoicism) is not as elegant as sublimation; it has none of the humanity of altruism or humor; and is often regarded by psychotherapists as a vice, not a virtue. Suppression involves the semi-conscious decision to postpone paying attention to a conscious impulse and/or conflict. A critical difference between suppression and repression, between stoical suppression and Spartan reaction formation is the degree to which with suppression all the components of conflict are allowed to exist at least partially in consciousness. The distinction between suppression and Pollyanna's dissociation is more complex. Both the stoic and Pollyanna note that clouds have silver linings, but Pollyanna leaves her umbrella at home. Evidence that suppression is not a conscious "cognitive strategy" as many believe is provided by the fact that jails would empty if delinquents could learn to just say "No."

## **Anticipation**

Like altruism, the use of anticipation is often voluntary and independent of conflict resolution. Rather, it is in cases of "hot cognition" that anticipation becomes an involuntary coping skill. If suppression reflects the capacity to keep a current impulse in mind and control it, anticipation is the capacity to keep affective response to an unbearable future in mind.

The defense of anticipation reflects the capacity to perceive future danger affectively as well as cognitively and by this means to master conflict in small steps. In the 1950s, as scientists began the deliberate study of healthy adaptation, Irving Janis discovered that moderate amounts of anxiety before surgery promoted adaptation. At the National Institute of Mental Health, David Hamburg and his colleagues noted the value of anticipatory mourning in parents of children with



leukemia. Psychiatrists responsible for preparing Peace Corps volunteers noted capacity to anticipate affective future difficulty better predicted subsequent adaptation than by their apparent emotional stability on psychological tests.

Anticipation involves more than just the ideational work of cognitive planning. Anticipation involves both thinking and feeling about the future. For example, legendary aviators, like Charles Lindbergh and Chuck Yeager, dealt with stress as Mithradites did with poison – taking a little at a time. To have underestimated danger would have been fatal. To have exaggerated danger would have been emotionally incapacitating. Thus, they worried in advance; they made lists; and they practiced. Then, appreciating that they had prepared as well as they could, they relaxed. Like suppression and altruism, anticipation is so easy to prescribe but so difficult to do.

## Humor

We all recognize that humor makes life easier. As Freud (1960) suggested, “Humor can be regarded as the highest of these defensive processes,” for humor “scorns to withdraw the ideational content bearing the distressing affect from conscious attention, as repression does, and thus surmounts the automatism of defense” (p. 233). Humor permits the expression of emotion without individual discomfort and without unpleasant effects upon others. Humor, like anticipation and suppression, is such a sensible coping device that it ought to be conscious, but, almost by definition, humor always surprises us. Like the other mature defenses, humor requires the same delicacy as building a house of cards – “timing is everything.” The safety of humor, like the safety of dreams during REM sleep, depends upon cataplexy. We see all, we feel much, but we do not act.

Humor keeps both idea and affect in mind. Mature humor allows us to look directly at what is painful, whereas dissociation and slapstick distracts us to look somewhere else. Much of humor is lost in the retelling and thus, it is difficult to illustrate.

Many questions remain unanswered in regard to defense mechanisms. It is unclear how mature defenses work to promote a positive psychology (enhanced ability to work, love and play) and at the same time reduce conflict and cognitive dissonance. It is yet to be determined whether adaptive defenses are inherited or whether they reflect traits that are acquired through education and maturation. Twin studies and fMRI could shed light on these unknowns. In addition, positive psychology needs to understand how best to facilitate the transmutation of less adaptive mechanisms into more adaptive ones. Existing methods include increasing social supports and interpersonal safety and facilitating the intactness of the central nervous system (e.g. rest, nutrition and sobriety). But the newer forms of integrative psychotherapies also can catalyze such change.

SEE ALSO: ► Altruism ► Humor ► Resilience

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## Meaning

Michael F. Steger

*University of Louisville*

Historically, one of humanity's prevailing concerns has been creating institutions, rituals, and beliefs that give life a sense of purpose, predictability, and comprehensibility. For example, religious beliefs express ideas of how and why the world came into being, cultural rituals lend predictability to the calendar year (a cultural notion itself), and the symbolism that drives language and human expression creates the disparate elements of life into an understandable whole. At a fundamental level, all of these processes can be considered efforts to identify meaning in the life around us. On an individual level, people are concerned with the purpose, predictability, and comprehensibility of each of their own lives. The psychological study of meaning in life is the study of the processes that lead to people's perceptions of purpose and comprehensibility in their lives.

## Dimensions of Meaning in Life

### The Presence of Meaning in Life

Meaning in life research has focused overwhelmingly on asking people whether their lives are meaningful or meaningless. This dimension of meaning in life is referred to as the presence of meaning in life, which has been defined as, "the extent to which people comprehend, make sense of, or see significance in their lives, accompanied by the degree to which they perceives themselves to have a purpose, mission, or over-arching aim in life" (Steger, in press). Those who report high levels of the presence of meaning in life are generally more satisfied with their lives and less distressed than those who report low levels.

Research also has illuminated the question of who has meaning, with highly religious people reporting the greatest presence of meaning in life. For example, nuns report higher levels of meaning in life than college students. In contrast, those who are struggling with psychological distress, such as psychiatric patients, and those who express a greater need for therapy report lower presence of meaning in life.

In addition to the presence of meaning, two other important dimensions of meaning in life exist, namely, the sources from which people say they draw meaning, and the degree to which people are engaged in the search for meaning.

### Sources of Meaning in Life

Research has also progressed in identifying the sources from which people feel they derive their sense of meaning in life. Relationships with others have emerged as the most important sources of meaning, both when people are given a number of sources to rank order and when they are simply asked what gives their lives meaning.

### The Search for Meaning in Life

Another dimension of meaning in life concerns people's search for meaning. Early theoretical work argued that people were endowed with an innate tendency to search for meaning in their lives, but empirical work generally failed to investigate these claims. The search for meaning in life refers to people's desire and efforts to establish and/or augment their understanding of the meaning, significance, and purpose of their lives. The presence of meaning and the search for meaning are empirically and theoretically distinct. As such, some people who are searching for meaning feel their lives are relatively meaningless, whereas others might consider the search for meaning to be a life-long devotion even though they feel their lives are relatively meaningful. Generally, those who are searching for meaning are a little more distressed than those who are not.

## Historical Background

Early consideration of life's meaning emerged from the existential philosophers following the two World Wars of the twentieth century. The notion that there was a single, absolute nature to the universe had been challenged previously, but following these wars, the existentialists argued that life had no intrinsic meaning, but rather was open to each individual to interpret. Thus, in contrast to centuries of theological and philosophical teachings, the idea began to take hold that each person needed to discover life's meaning on his or her own. This idea was brought to psychology by Viktor Frankl, who argued that having a sense of purpose or mission in life was essential to healthy human functioning. He later argued that the principal cause of psychological maladies in the modern, post-World War II world was a loss of purpose, leading to people's experiences of life without meaning. Frankl became the figurehead of theoretical, therapeutic, and research efforts in psychology directed to understanding how psychotherapy affected people's sense of meaning and purpose (i.e., the presence of meaning in life). One of the most popular research topics in the early decades of meaning in life research was

showing that some groups of people reported greater presence of meaning than others (e.g., nuns). This interest in group differences has persisted throughout the span of research on meaning, but over time, interest mounted in understanding the connections between meaning and other variables, such as religion, and the role of meaning-making processes in coping with stress and trauma.

## **Recent Work on Theory and Research**

Currently, theoretical efforts attempting to place meaning in life within the broader context of human well-being have influenced researchers to examine the similarities and differences between meaning in life dimensions and other constructs such as life satisfaction, positive affect, and self-esteem. Other theoretical efforts have focused on explaining meaning in life in terms of cognitively based meaning systems, which consist of mental representations of one's self, the world, and the relationship between the two.

Recent research efforts have primarily focused on continuing to delineate the psychological nature of dimensions of meaning in life. For example, research has been conducted demonstrating that people report greater presence of meaning in life when they have been induced to feel positive mood. There is also heightened interest in using biological methods to look at the construct of meaning in life. For example, some research has examined whether the presence of meaning has unique biological markers.

## **Methodological Issues in the Study of Meaning in Life**

Just as the preponderance of meaning research has focused on the presence of meaning, the methods used in meaning research show a similar imbalance. This is unfortunate, as a variety of methods have been used to understand meaning and meaning-related constructs, including the use of self-report surveys, informant reports, goals approaches, narrative approaches, daily diaries, longitudinal studies, quasi-experiments, and experiments.

Most of what we know about meaning in life is based on the use of self-report surveys. There are several merits to using such an approach, and the fact that findings have been very consistent across studies increases our confidence in survey-based reports. However, among the many, familiar limitations of survey methods, several in particular are relevant to this area of research. Methodological sources of error, including method variance and flawed measurement, have been a source of concern to meaning in life researchers for several decades. Studies that have used more psychometrically sound measures have generally replicated the findings obtained using potentially flawed measures, although the magnitude of relations observed has usually been lower. Thus, the concern here is not so much that we do not know what meaning in life is related to, rather that the exact magnitude

of these relations might be obscured by shared method variance or flaws in the surveys used. The lack of precision associated with method variance and the use of flawed measures also can obscure multivariate relations between meaning in life and other variables. For example, a researcher might be interested in knowing whether therapy increases a sense of meaning in life, and whether such an increase in meaning is associated in turn with a decrease in depressive symptoms. The most commonly used meaning survey, the Purpose in Life Test contains items that are closely related to depressive symptoms (e.g., suicidal thoughts). If a researcher was using this survey, it would be impossible to identify the specific contribution of meaning in life to a reduction in depressive symptoms because the measures are conflated. An additional concern is the fact that survey methods cannot illuminate causal relationships to a satisfactory degree. Informant reports have been used to establish the convergent validity of some measures of meaning in life, and they, along with goals approaches (in which participants are asked to describe the goals they are typically trying to accomplish, and correlations are assessed between ratings along various dimensions and outcomes of interest), help reduce some of the concerns regarding methodological error sources. These methods are each fairly limited, however, in what they can tell us about how meaning in life is found or created.

One alternative approach focuses on the stories people develop about their lives or important life events. These narrative approaches have found that both the process of telling such stories, as well as the contents of the stories appear important. In regards to process, the act of writing about life events is associated with a range of positive outcomes, and is instrumental in finding meaning in it. It is thought that this is facilitated by the integration of the event in to a larger, overarching meaning system. In regards to the contents, researchers have found that who people tell a story in terms of their experience of an adverse event, and their eventual ability to overcome the event and find positive outcomes, showed improved adjustment (e.g., higher generativity). Narrative approaches are well-suited for understanding people's perceptions of how they came to feel their lives are meaningful, and are also less susceptible to shared method variance with meaning in life questionnaires.

Daily diary methods also serve to reduce concerns about shared method variance. In meaning in life research, diary methods have been used to demonstrate that meaning in life mediates the relation between religious experience and well-being. Diary methods are also longitudinal methods, and can be used to test hypotheses regarding the temporal sequence of meaning in life processes.

There have also been several studies that have examined meaning over longer periods of time. One important use of longitudinal methods has been to examine the role of meaning in successful aging. Findings from one study indicated that meaning in life was associated with successful aging 14 months later, controlling for demographic variables and traditional predictors, such as social and intellectual resources. Such encouraging work is integral to validating meaning as a key feature of optimal human development.

Quasi-experimental approaches have typically compared groups of individuals that differ on variables presumed to be influential to people's ability to find meaning in life. As noted previously, this research generally finds that normal populations report greater meaning than clinical populations, and that clergy report greater meaning than normal populations.

Finally, a limited number of experiments have been conducted looking at causal mechanisms underlying meaning in life. Most directly related is the research by King and colleagues, which used several experiments to demonstrate that inducing positive affect leads to higher assessments of meaning in life. Research associated with Terror Management Theory has demonstrated that following reminders of death, people feel their lives are more meaningful if they are given the opportunity to profess support for their culture's worldview, and less meaningful if they are not given that opportunity. The experimental investigations relevant to meaning have generally looked at meaning as an outcome, and as such this research helps illuminate some of the factors that influence people's perceptions that their lives are meaningful, implicating positive affect and adherence to cultural worldviews. More research of this type is needed to continue to make progress in understanding the consequences, as well as the precedents of meaning in life.

## **Future Directions**

Several future directions have been suggested for meaning in life research. Among the most compelling are those that have the potential to demonstrate the relevance of meaning in life dimensions to psychological and physical health. As such, renewed interest in the role of meaning as a facilitator and an outcome of psychological treatment would be most welcome, particularly when included in well-designed, randomized clinical trials. Research on stress and coping should also help to solidify the importance of having a sense of meaning to people's ability to adjust to adverse life events. We should also endeavor to identify the neurological substrates, biological markers, and biometric features of meaning in life. As it becomes clear how meaning supports human functioning, it will become increasingly important to expand our understanding of the development and change in meaning over the lifespan.

As noted in the preceding sections, many questions remain about the fundamental nature of meaning in life dimensions, and their relations with other psychological variables. Thus, much basic research remains necessary. Cross-cultural research would enable us to understand the universality of experiences of meaning, as well as suggest some of the domains from which people draw meaning in life. For example, those from cultures that stress individual happiness (e.g., United States) report greater presence of meaning in life than those from cultures that stress collective harmony (e.g., Spain). Understanding the cultural mechanisms behind these differences would shed light on how people derive meaning from

life. Another way to access this question is to use experimental methods that identify those factors that increase or decrease meaning (e.g., positive affect), as well as assessing the effects of temporary manipulations of meaning.

SEE ALSO: ► Eudaimonia ► Frankl, Viktor

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## Meditation

Shauna L. Shapiro  
*Santa Clara University*

Meditation refers to a family of techniques used to consciously train attention in a nonanalytical, nondiscursive way. Meditation is independent of a religious orientation, although it can occur within religious or spiritual frameworks.

In the 1970s research on meditation began in earnest and has since increased significantly. The transplantation of meditation into Western study occurred, however, within a traditional behavioral framework emphasizing symptom reduction and alleviation with little attention to development, enhancement, growth and cultivation of positive psychological qualities and experiences. As a result, one of the principal original goals of meditation, to uncover the positive and to catalyze our internal potential for healing and development, has been largely ignored. Yet, a small number of researchers and theorists have and continue to explore the positive effects of meditation.

## Meditation

Meditation originally was conceived within the religious/philosophical context of Eastern spiritual disciplines but is an essential element in nearly all contemplative religious and spiritual traditions, including Judaism, Christianity, and Islam. Various methods whose background and techniques are quite different from one another (for example, Transcendental Meditation [TM], Zen meditation, Vipassana meditation) are placed collectively under the umbrella term of *meditation*.

The family of techniques traditionally has been divided into concentrative meditation and mindfulness meditation. In all types of concentrative meditation, there is an attempt to restrict awareness by focusing attention on a single object. The practitioner attempts to ignore other stimuli in the environment and focus

complete attention on the object of meditation. Attention is focused in a non-analytical, unemotional way, in order to directly experience the object of meditation, which can be located in either the external or internal environment. Examples of the object include the breath, a mantra, a single word (for example, “one”) or specific sounds.

In mindfulness meditation, an attempt is made to attend nonjudgmentally to all stimuli in the internal and external environment, but not to get caught up in (ruminate on) any particular stimulus. Mindfulness meditation is referred to as an opening up meditation practice. Some meditation techniques involve integrated elements of both concentrative and opening types. For example, a person may focus on breathing (Zen and Vipassana meditation) or a mantra (e.g., TM), but be willing to allow attention to focus on other stimuli if they become predominant and then return to the breathing (or mantra).

Finally, in developing an understanding of meditation, it is crucial to note that meditation training differs both operationally and in its deep intentions from relaxation training. First, an emphasis of meditation is the development of greater understanding through the systematic cultivation of inquiry and insight, whereas the objective of relaxation training is to achieve a state of low autonomic arousal, with little or no emphasis on the cultivation of inquiry or insight. Relaxation is often a by-product of meditation, but it is not an objective of the process. Furthermore, relaxation is taught as a technique, to be used during stressful or anxiety provoking situations. Meditation, in contrast, is not a technique whose use is contingent upon stressful situations; rather, it is conceived as a “way of being” that is to be cultivated daily regardless of circumstances. The formal meditation practice seeps into daily life, bringing greater nonjudgmental consciousness to everything that an individual does, feels and experiences.

## Original Intentions of Meditation

Abraham Maslow stated “what we call ‘normal’ in psychology is really a psychopathology of the average, so undramatic and so widely spread that we don’t even notice it ordinarily” (1968, p. 16). Meditation disciplines have been suggesting this for over 2,500 years, teaching that individual “normal” minds are untrained and often unconscious, which inhibits them from reaching their fullest potential. The intention behind meditation is to “wake up” from a suboptimal state of consciousness; wake up to a person’s true nature.

Walsh (1983), a pioneer in the field of meditation research, identified the ultimate aims of meditation practice as “the development of deep insight into the nature of mental processes, consciousness, identity, and reality, and the development of optimal states of psychological well-being and consciousness” (p. 19). Meditation provides roadmaps to help recognize and let go of old structures and evolve toward new ways of seeing and being as individuals experience deep insights into the nature of mind and the path toward optimal health (Walsh, 1983).



The intention behind meditation practice is to help develop and train the mind toward optimal states of empathy, joy, compassion, awareness and insight, with the ultimate intention of total liberation. And yet, research exploring the effects of meditation to attain these goals has been scarce. With few exceptions, research has not measured the deeper levels of meditation's original intent, but instead has focused on traditional psychological variables (e.g. reducing anxiety, depression).

## **Meditation Research**

Over the past three decades, there has been considerable research examining the psychological and physiological effects of meditation. Moreover, meditative practices are being utilized in a variety of health care settings. Research demonstrates that meditation is an effective intervention for cardiovascular disease; chronic pain; anxiety and panic disorder; substance abuse; dermatological disorders; prevention of relapse of MDD and, reduction of anxiety and depressive symptoms in non-clinical populations.

As noted, few researchers have examined meditation's original purpose as a self-liberation strategy to enhance positive psychological qualities. Despite this, a small number of pioneering studies have addressed the effects of meditation on positive psychological health.

Meditation appears to result in improvements in intelligence, school grades, learning ability, and short- and long-term recall. There also is evidence that these improvements in memory and academic performance associated with meditation apply across the lifespan. Preliminary research confirms that meditation can cultivate creativity. Further, meditation has been shown to increase concentration and attention as well as relationship satisfaction in couples. In individuals, meditation has been shown to increase happiness and positive affect, optimism, self-compassion and empathy, and moral maturity and spirituality.

Meditation may help human beings identify and actualize their potential strengths. The field of positive psychology offers new opportunities and methodologies to examine the original intentions of meditation. In fact, meditation can be considered an applied positive psychology practice that has wide application for promoting positive health in medicine, business, and education. Meditation offers paths to exceptional states of mental well-being and attentional control that have been systematically developed and practiced for 2,500 years. In this way, meditation may help positive psychology examine and reevaluate the current definition of "normal" and expand Western psychology's concept of mental health. Exploration of meditation requires great sensitivity and a range of methodological glasses. Future research into the positive effects of meditation will help illuminate the richness and complexity of this age-old practice.

SEE ALSO: ► Buddhism ► Consciousness ► Mindfulness ► Religiousness  
► Spirituality

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## Menninger, Karl

Lisa Lewis and Roger Verdon  
*The Menninger Clinic*

Karl Menninger, MD, one of the most influential figures in American psychiatry, cofounded The Menninger Clinic in Topeka, Kansas, in 1925 with his father C. F. and his brother Will. At a time when mentally ill persons were regularly institutionalized, Dr Menninger espoused the belief that even custodial patients in asylums were treatable. His pioneering efforts had remarkable results and his clinic swiftly came to the nation's attention as a premier treatment center.

Writing *The Human Mind* in 1930, the best-selling, plainly written book successfully explained Freud and psychiatry to a curious and grateful American lay public. Thereafter, over a lifetime of teaching, lectures, speeches, published books, chapters and papers, Dr Karl, as he was known, demystified psychotherapy and psychoanalysis, while advocating the belief that there was hope for every individual who struggled with mental illness.

Along with cofounders, he set up the world's largest center for psychiatric training, the Karl Menninger School of Psychiatry & Mental Health Sciences, which trained as many as 100 residents per year shortly after World War II. During his lifetime he championed the rights of children and Native Americans, proposed prison reform, and vehemently opposed war.

Over the course of his long career in medicine, he came to be known in some circles as the “dean of American psychiatry.” A prolific writer and a dynamic speaker, Dr Karl's ability to capture a thought with a pithy comment or render an insight in a few brief words, reflected a sharp, and often witty, mind. Some of his oft-repeated and revealing quotes include:

Love cures people – both the ones who give it and the ones who receive it.  
 The central purpose of each life should be to dilute the misery in the world.  
 Hope is an adventure, a going forward, a confident search for a rewarding life.  
 One does not fall into love: one grows into love, and love grows in him.

Above all, Dr Karl was not a shrinking violet and said what he thought. Believing that hope was a vital part of the healing process, Dr Karl took his own profession to task in his famous 1959 presidential address to the American Psychiatric

Association in which he deplored the lack of scientific attention to hope as a key in treating mental illness. Later studies affirmed Dr Karl's lifelong belief that instilling hope in patients produced favorable outcomes.

Dr Karl died July 18, 1990, four days short of his 97th birthday, the last cofounder to pass away. The Menninger Clinic continues to operate in Houston, Texas, where it is affiliated with Baylor College of Medicine and The Methodist Hospital. The Clinic's adopted slogan is "Discovering hope, one life at a time," words that echo Karl Menninger's beliefs.

SEE ALSO: ► Hope ► Mental illness

## Mental Health

Corey L. M. Keyes and Barret Michalec

*Emory University*

In 1999, the Surgeon General's report focused for the first time on mental rather than physical health. In that report, mental health was defined as "a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with people, and the ability to adapt to change and to cope with adversity" (U.S. Public Health Service, 1999, p. 4). In 2004, the World Health Organization's historic first report on mental health promotion defined mental health as:

a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. (World Health Organization, 2004, p. 12)

In contrast, mental disorder (synonymous with *mental illness*) is a persistent deviation from normal functioning that is sufficient to cause emotional suffering and role impairment, diminishing individuals' capacities to execute their responsibilities as a parent, spouse, or employee.

Although it sounds serious, and its name equates it with physical illness, mental illness was not considered a priority by the medical and public health community until the last decade of the twentieth century. In 1996, the World Health Organization published the results of the Global Burden of Disease study. This study calculated the total contribution of acute and chronic medical conditions and illnesses to a measure of the disability life-adjusted year (DALYs). The DALY reflects the total number of years in a population (i.e., in a developed or developing nation) that was either lived with disability (i.e., unable to perform activities of daily living, etc.) or abbreviated prematurely (i.e., as compared against the average life expectancy for that person's race, sex, and age) and could be attributed to a specific physical or mental condition or illness. To the surprise of many, major depression was among the top five illnesses contributing to DALYs in both developed and developing

nations. Moreover, the category of mental disorders was second only to the category of cardiovascular diseases in contributing the DALYs.

Health economic studies calculate the cost of health conditions in terms of their contribution to direct costs – i.e., the costs of treating the condition – and in terms of indirect costs – i.e., the costs accrued due to lost productivity from the illness causes sick-days, work cutbacks, and presenteeism (i.e., remaining at work but not being as productive as would be estimated without the illness). Major depression alone has been estimated to cost annually in excess of \$40 billion in total costs (i.e., combined direct and indirect). Mental disorder, as a class of conditions, is among the three most costly conditions in the US (along with cardiovascular diseases and physical rehabilitation), resulting in a higher amount of combined cost than diabetes, cancers, stroke, arthritis, digestive disorders, or HIV/AIDS.

Studies of the population estimate that as much as one-half of adults will experience at least one episode of mental illness in a lifetime. Furthermore, research has also revealed that a prior episode of mental illness increases the chances of a future episode of mental disorder. During the twentieth century, the average age of the first onset of any mood disorder (e.g., depression), of any anxiety disorder (e.g., generalized anxiety disorder), and any substance disorder (e.g., alcohol dependence) decreased, while the average life-expectancy at birth increased by 30 years. It should not be surprising, then, that mental health advocates cite population studies showing rising rates of mental illness in the U.S. population and argue these changes reflect actual change in the mental health of the U.S. population rather than merely being artificial changes in the measurement and diagnosis of mental illness and decreased sensitivity of the population to reporting mental illness symptoms.

## From Treatment of Mental Illness to the Study of Mental Health

Treatments for mental disorder have come a long way from trephening – i.e., drilling a small hole in the patient's skull to release the pressure or demons that were presumed to cause the disorder – to prescription medicines designed to enhance neurotransmission and psychotherapies that aim to enhance patient's cognition and coping strategies. Starting in the 1990s, *Consumer Reports* magazine – which tests and then reports on the quality of consumer products – periodically devotes a section to the effectiveness of mental illness treatments. Most patients, by some estimates as many as 7 of every 10, who receive either prescription medications, psychotherapies, or a combination of the two, benefit substantially. Unfortunately, studies suggest that barely half of individuals in the population who would need treatment, because they fit the criteria for a mental disorders, also report receiving treatment.

Remission from a mental disorder following a course of treatment tends to be partial or short lived for up to 60%, and sometimes more, of patients. Moreover,

current treatments for mental illness are palliative, providing symptomatic relief but not a cure. As such, the director of the NIMH has recently discussed the new research goal of cure therapeutics and the overall need for and likelihood of finding cures for mental disorders. Advocates and scientists of mental illness believe, and convey to the public, that the treatment, cure, or prevention of mental illness is the only and the best way to promote the overall mental health of the population. However, Corey Keyes believes that this is “promising too much” at best, and a “false promise,” at worst.

Keyes’ research on mental health as a *complete* state suggests that the paradigm of mental health research and services in the US must include two, complementary, ongoing strategies: the promotion and maintenance of mental health as “flourishing,” as well as the treatment and prevention of mental illness. Research on the national sample of U.S. adults has shown that measures of mental illness and measures of mental health form two distinct continua. In other words, the absence of mental illness does not translate into the presence of mental health as flourishing. In turn, measures of work productivity, disability, chronic physical illness, cardiovascular disease, psychosocial functioning, and healthcare utilization reveal that anything less than mental health as flourishing is associated with increased impairment and burden to self and society. In other words, the absence of mental health is as problematic as the presence of mental illness, and only mental health as flourishing is associated with the desired quality of execution of social roles and responsibilities as well as health and work productivity outcomes. Whereas more US adolescents (i.e., ages 12 to 18) are flourishing than adults (i.e., ages 25 to 74), barely one-half of adolescents and barely 20% of adults are flourishing. In other words, only a small proportion of those otherwise free of common mental disorders are mentally healthy, i.e., flourishing.

In sum, mental health is a positive state of well-being, as conceptualized by the Surgeon General, the World Health Organization, and as studied in the concept of flourishing. Mental illness is a persistent deviation of normal functioning that results in emotional suffering and significant impairment of functioning at a high cost to society. However, it is now clear that the absence of mental illness is not the presence of mental health. Moreover, mentally healthy, i.e., flourishing, individuals function markedly better than all others, even those who are otherwise free of a mental illness but have moderate or low levels of well-being. While the surplus of mental illness is a serious public health issue, so too is the deficit of flourishing, i.e., mental health, in the US.

SEE ALSO: ► Flourishing ► Mental illness ► Well-being

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## Mental Illness

Stephanie E. Petersen

*Private practice, Houston, Texas*

The term *mental illness* refers to severe emotional or thought disturbance that negatively affects one's health and safety. It is a collective term for all of the diagnosable mental disorders. Those with any of the severe mental disorders present with disturbances of thought and perception, dysregulation of mood, excessive and inappropriate anxiety, and/or cognitive abnormalities. People with disorders such as schizophrenia may be viewed as experiencing serious mental illness, but other disorders are best considered to have symptoms which occur on a continuum of severity. Mental disorders are a relatively common occurrence; in a given year an estimated one in four American adults experiences a diagnosable mental disorder. Serious mental illness is concentrated on a smaller group, approximately 6% of the US population. Many individuals suffer from more than one mental disorder at a time, with nearly half of those with a mental disorder meeting criteria for two or more disorders. Mental disorders often demonstrate an onset of symptoms by adolescence, with half of lifetime cases of mental illness beginning by 14 years of age, although many do not seek treatment until long after the first onset of symptoms. Untreated mental illness can lead to more severe, more difficult to treat illness, and the development of cooccurring mental illness.

*The Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, consists of a classification of mental disorders which are conceptualized as clinically significant behavior or psychological syndromes associated with distress, disability, and impairment in functioning. Schizophrenia and other psychotic disorders include prominent psychotic symptoms which include positive symptoms such as delusions, hallucinations, and disorganized speech/behavior. There may also be negative symptoms which involve deficits such as flat affect, anhedonia, or a lack of motivation or initiative. Disturbances of mood involve sustained feelings of sadness and/or a sustained elevation of mood. Such symptoms correspond to diagnoses of either a depressive or bipolar disorder. Anxiety disorders are characterized by excessive fear in response to a threatening event and may include symptoms such as panic attacks (i.e., a sudden, discrete episode of an extreme anxiety reaction) or agoraphobia (i.e., avoidance of different places or situations). Specific diagnoses include specific phobias, generalized anxiety disorder, obsessive-compulsive disorder, post-traumatic stress disorder, and panic disorder. Somatoform disorders include the presence of physical symptoms that suggest a general medical condition and are not fully explained by a general medical condition, by the side effects of a substance, or another mental disorder. It is not intentional or under one's

voluntary control. Factitious disorder consists of physical or psychological symptoms intentionally produced or feigned to allow one to assume a sick role. Mental disorders may be diagnosed by a mental health professional through the use of clinical assessment techniques such as clinical interview (which may include some form of mental status examination), behavioral observation and assessment, and psychological testing (such as projective testing, personality inventories, and intelligence testing).

The U.S. Surgeon General released a report on mental illness in 1999 which emphasized the importance of treatment and the need for increased public awareness to decrease the stigma associated with mental illness and encourage individuals to seek treatment when necessary. Those with mental illness must deal with the disability itself, as well as negative public reaction and social stigma which may affect opportunities for work and achievement of goals. The stigma often prevents people from seeking needed treatment. Laws such as the Americans with Disabilities Act have helped, as well as an increased understanding of mental disorders and recognition of the need for treatment. Roughly one-third of individuals with mental illness receive adequate treatment, while many receive no treatment at all. Beyond medication, there is increasing recognition of a need for rehabilitative and recovery-oriented services for those with serious mental illness, including the development of evidence-based treatments which would allow individuals to gain the skills need to live productively in the community. Therapeutic approaches to treatment of mental disorders include psychodynamic, interpersonal, and cognitive-behavioral approaches. Many members of racial and ethnic minority groups are underserved by the mental health services system, thus there is a need for linguistically and culturally competent services to provide treatment for individuals from different cultural groups. The etiology or causes of mental illness are not completely known, but thought to be shaped by biological, psychological, and social/cultural factors (and the interaction among each). This biopsychosocial model of disease provides a framework for understanding health and disease which takes into account the interaction among each of those factors.

SEE ALSO: ► Abnormal psychology ► *Diagnostic and Statistical Manual*  
► Mental health ► Psychopathology

## Mindfulness

Ellen Langer

*Harvard University*

*Mindfulness* is the feeling of involvement or engagement. It is an active state of mind that is achieved by simply noticing new things. It doesn't matter how smart or silly the new distinctions are, just that they are novel. By actively drawing novel distinctions we become situated in the present, sensitive to context and perspective.

We can follow rules and routines, however, when we are mindful they guide rather than govern our behavior. Many extol the virtues of being in the present. When in the present we can take advantage of new opportunities and avert the danger not yet arisen. Indeed, everyone thinks they are in the present. When we are mindless, however, we are unaware that we are not in the present.

What is *mindlessness*? It is not the same thing as ignorance, stupidity or vigilance. Mindlessness is an inactive state of mind that is characterized by reliance on distinctions drawn in the past. When we're mindless we are trapped in a rigid perspective, insensitive to the ways meaning changes depending on subtle changes in context. The past dominates and we behave much like automatons without knowing it, where rules and routines govern rather than guide what we do. Mindless behavior is characterized by a reliance on old, often outdated categories, a lack of spontaneity and a reduced awareness of one's social and physical world. Mindlessness freezes our responses and closes us off to needed change. While some have argued that mindless behavior may be positive at times, a closer examination reveals that mindlessness is rarely, if ever, beneficial because it closes us off to possibility. Essentially we freeze our understanding and become oblivious to subtle changes that would have led us to act differently, if only we were aware of them. Mindlessness is pervasive and costly and operates in all aspects of our lives. Although we can see it and feel it in other people we are blind to it in ourselves.

Ignorance is not knowing and stupidity may be understood as knowing wrongly. Mindlessness, on the other hand refers to a way of knowing irrespective of content. It refers to information that is essentially frozen in the form in which it was originally learned. Vigilance may seem like mindfulness to some but is more akin to mindlessness in that when vigilant, we hold our attention still and focus on a single stimulus. If we were on horseback and were vigilant of the trees in the path we very well might not notice the boulder soon to cause the horse to trip.

Mindlessness comes about in two ways. It may occur either through repetition or on a single exposure to information. The first case is the more familiar. Most of us have had the experience, for example, of driving and then realizing, only because of the distance we have come, that we made part of the trip on "automatic pilot," as we sometimes call mindless behavior. Another example of mindlessness through repetition, is when we learn something by practicing it so that it becomes like "second nature" to us. We try to learn the new skill so well that we don't have to think about it. The problem is that if we've been successful, it won't occur to us to think about it even when it would be to our advantage to do so. If, for example, we practiced holding our tennis racket in a particular way so that we don't have to think about it any more and then found that we had to use someone else's racket that was heavier than ours, we may perform poorly because we're unlikely to change our grip to meet the new circumstances. Moreover, many of us learn "the basics" mindlessly without thinking to question whose basics we're learning. What is basic for some may not be the best approach for others.

We also become mindless when we hear or read something and accept it without questioning it. Most of what we know about the world or ourselves we have



mindlessly learned in this way. An example I'm particularly fond of is of my own mindlessness that I wrote about in *The Power of Mindful Learning*. I was at a friend's house for dinner and the table was set with the fork on the right side of the plate. I felt like some natural law had been violated because the fork "goes" on the left side! I knew this was ridiculous. Who cares where the fork is placed. Yet it felt wrong to me, in spite of the fact that I could generate many ways it was better for it to be placed on the right. How had I learned this? I didn't memorize how to set a table. One day as a child, my mother simply said to me that the fork goes on the left. Forever after that is where I am destined to put it, no matter what circumstances might suggest doing otherwise. I became trapped without any awareness that the way I learned the information would stay in place in the future. Much of what we know now we mindlessly learned in the past under different circumstances that closed the future to potentially new and helpful alternative understandings. Whether we become mindless over time or on initial exposure to information, we unwittingly lock ourselves into a rigid understanding of information.

Mindlessness is pervasive and the costs are great. For those of us who learned to drive many years ago, we were taught that if we needed to stop the car on a slippery surface, the safest way was to slowly, gently, pump the brake. Today most new cars have anti-lock brakes. To stop on a slippery surface, now the safest thing to do is to step on the brake firmly and hold it down. Most of us caught on ice will still gently pump the brakes. What was once safe is now dangerous. The context has changed but our behavior remains the same, the essence of mindlessness.

Much of the time we are mindless yet thirty years of research reveals that mindfully noticing new things results in nursing home residents living longer; students learning better; and results in more intelligent and creative products, and positive affect, to name a few of the findings. Moreover, in our most recent research we have found that dolphins, children and adults are more attracted to people when they are mindful. Thus it may be the essence of charisma. Research also has shown that the more distinctions we draw, the more we like the target of our mindfulness and the more we remember about it. It can even be recognized in the products we produce. In recent research, for example, orchestras performed mindlessly or mindfully. (To accomplish the latter, all they were instructed to do is to make their performance new in very subtle ways that only they would notice.) The musicians preferred playing this way and when the recorded pieces were played for audiences, they too overwhelmingly preferred the mindfully played piece. In other research we found the same to be true for drawings and essays, i.e. those that were mindfully produced were preferred.

Most of what we learn we learn in an absolute way, without regard to how the information might be different in different contexts. We are taught that  $1 + 1 = 2$ . Yet if we added one wad of chewing gum to one wad of chewing gum,  $1 + 1 = 1$ . If we used a binary system, then  $1 + 1 = 10$ . When we learn mindlessly, we take the information in as true without asking under what conditions it may not be true. This is the way we learn most things. As a result, although we may be confident, we're often in error.

When information is given by an authority, appears irrelevant, or is presented in absolute language, it typically does not occur to us to question it. We accept it and become trapped in the mindset, oblivious to how it could be otherwise. Authorities are sometimes wrong or overstate their case and what is irrelevant today may be relevant tomorrow. Indeed, most of the information we receive is typically couched in absolute language that we accept without regard to context or nuance. Mindful learning is more like learning probable “truths” rather than mindlessly accepting absolutes.

Language too often binds us to a single perspective with mindlessness as a result. In one of our studies, Alison Piper and I introduced people to a novel object in either an absolute or conditional way. They were told that the object “is” or “could be” a dog’s chew toy. We then created a need for an eraser. The question we considered was who would think to use the object as an eraser? The answer was only those subjects who were told “it could be a dog’s chew toy.” The name of something is only one way an object can be understood. If we learn about it as if “the map and the territory” are the same thing, creative uses of the information will not occur to us. Learning conditionally, i.e. mindfully, results in increased creativity, higher attention levels, and improved memory. One hallmark of how information is traditionally imparted is to reduce or eliminate uncertainty. We want to know what things are and mean with no ambiguity. Unfortunately, however, this mindset increases mindlessness. Ironically, people seem to like choice but to dislike doubt. Without uncertainty there can be no meaningful choice. In contrast, when we exploit the power of uncertainty, we learn what things can become and as a result, the world becomes richer in possibility.

Everything is always changing. Even the cells in our bodies are constantly changing. When we experience stability, we are confusing the stability of our mindsets with the stability of the underlying phenomenon. Instead, we should consider exploiting the power of uncertainty so that we can learn what things can become. Mindfulness that is characterized by novel distinction-drawing will lead us in this direction. When we stay uncertain, we stay in the present and we notice and when we notice we become mindful.

The antidote, then, to mindlessness is to learn to be more mindful, which is often an easier task than it first appears to be. When we are mindful, we are actively drawing novel distinctions rather than relying on distinctions drawn in the past. Although similar to the concept of mindfulness found in Eastern religions, mindfulness, as I’ve researched it for over 30 years, comes about in a different, more immediate, way and springs from a Western, scientific perspective. Becoming more mindful requires learning to switch modes of thinking about ourselves and the world. Meditation, regardless of the particular form, is engaged to lead to post-meditative mindfulness. Meditation grew up in the East. Whether practicing Zen Buddhism or Transcendental Meditation, for example, typically the individual is to sit still and meditate for 20 minutes twice a day. If done successfully over time, the categories we mindlessly committed ourselves to start to break down. The two are by no means mutually exclusive. In our work we provoke mindfulness by active

distinction-drawing. Noticing new things about the target reveals that it looks different from different perspectives and thus categories break down and become more malleable.

The idea that mindfulness can result without meditation, has been confirmed by the results of years of research that also makes clear its importance to health and well-being. When we learn our facts in a conditional way, we are more likely to draw novel distinctions. Mindfulness that is characterized by novel distinction-drawing or meditation that results in post-meditative mindfulness both lead in the direction of health and well being.

SEE ALSO: ► Charisma ► Meditation

## Moral Development

John C. Gibbs

*The Ohio State University*

The emergence, socialization, and growth of morality are of major importance in the social and behavioral sciences. Psychological theories have conceptualized three main sources of moral development and prosocial behavior. First, theorists have posited *biology* as the source of moral development, emphasizing the natural emergence of an empathic predisposition. Second, theorists have located morality's source in *society*, focusing on the socialization or internalization of a society's prescriptive norms and values. Finally, theorists have identified the *mental coordination of perspectives* as the primary source, focusing on the construction of mature moral judgment. Integrative views have recently appeared.

### Biology as the Source of Moral Development

Prosocial or cooperative behavior has been observed in ethological studies of mammalian social groups. Chimpanzee groups may cooperatively hunt, share meat after a kill, groom one another, and adopt a motherless infant. Humans beyond infancy are likely to help others in distress, at least when egoistic motives do not compete and other potential helpers are absent. Sociobiologists emphasize that prosocial behavior can be adaptive not only for the group but also for the helper insofar as the individual helped is genetically related. Even if the helper does not survive, some portion of the helper's genes may pass on through the helped individual. Prosocial behavior is also adaptive for the individual in the case of reciprocal altruism, that is, when the recipient may eventually reciprocate the help.

The tendency of higher animals to help one another may derive at least partially from a capacity for empathic arousal. Empathic responses are widely observed among primates. Human newborns spontaneously cry upon hearing other infants'

cries (more so than upon hearing their own cry or a comparably loud nonhuman sound), suggesting an early capacity for conditioning and vicarious arousal. The biological (genetic, neural) basis of empathy has been established by various research findings: greater empathic responding in identical than fraternal twins; brain images depicting prefrontal regions activated by others' distress in normal individuals; poor empathic responding in patients with ventromedial prefrontal damage; and poor aversive conditioning of psychopathic individuals.

Moral development and prosocial behavior entail the emergence, then, of a biologically based capacity for empathic arousal. The mechanisms of empathy emergent in infancy, however, are insufficient to support mature moral behavior in adults. Empathy must gain cognitive subtlety or depth, balance, accuracy, and social breadth for mature moral behavior, a point emphasized in integrative views.

## **Society as the Source of Moral Development**

Other theorists have focused on society, or social institutions such as the family, as the source of moral development and prosocial behavior. Moral socialization or internalization theories address morality's movement from society to the individual. Among sociologists, Emile Durkheim emphasized the inculcation in the child of a sense of respect for society's collective norms and standards. Alvin Gouldner studied the reciprocity norm, comprised of prescriptions that one should reciprocate if one receives help and, indeed, should take into account how anyone would wish to be treated in the way one treats others (the Golden Rule). The reciprocity norm is taught and internalized in many societies. Gouldner attributed the reciprocity norm's universality to its adaptive value in supporting cooperative behavior.

Developmental psychology traditionally features internalization theories. In Freudian theory, one posits that internalization takes place as the young child identifies with the same-sex parent, thereby incorporating the parent's moral standards and values. In social learning theory, children develop morally as they observe and imitate the prosocial behavior of nurturant models (typically the parents). Children are rewarded or praised or are disciplined for transgressions. Attachment theory warns that child maltreatment can undermine identification with the parent or moral internalization. Maltreatment prompts the child to see the world as a hostile place. Accordingly, the child may engage in destructive behavior against others or the self.

## **Hoffman's Integrative View**

Taking into account both biological and societal origins of morality is developmental psychologist Martin Hoffman's integrative view. Hoffman's theory begins with empathic arousal but emphasizes its development and socialization. The biologically based empathy of infancy is not only unsophisticated but egocentric. The

empathic predisposition is rendered less egocentric in part through cognitive development and social perspective-taking. The adolescent and adults typically sympathize with the plight of entire groups of unfortunate or victimized individuals. The availability and potential activation of multiple mechanisms or modes (such as social perspective-taking) render the empathic predisposition more complex and reliable. Advanced cognitive and social modes can promote – but do not assure – mature (balanced, subtle, expanded) morality.

To promote mature morality, the motive power of empathy must be cultivated and prosocially channeled in the course of socialization. Hoffman emphasizes the discipline encounter in moral internalization and prosocial behavior. By pointing out how their child's transgression has harmed others, parents induce empathy-based guilt (a technique Hoffman termed "inductive discipline") and thereby empower internalized prosocial norms of reciprocity and restitution. Inductive appeals can become more subtle as the growing child's empathic predisposition becomes more cognitively sophisticated.

Although Hoffman's view encompasses the child's empathy and cognitive development, it still shares with other internalization theories certain limitations. If mature morality moves from a given society to the individual, then morality becomes relative to various given cultural norms and ground is lost for evaluating cultural practices such as female genital mutilation, suttee, and slavery. In other words, internalization theories (as well as the relativistic assumptions prevalent in cultural anthropology) may not adequately capture the universal or cross-culturally general aspects of moral development, moral maturity, and prosocial behavior. Anne Colby and William Damon studied contemporary moral exemplars, or persons dedicated to moral integrity, promoting social justice, and helping unfortunate or victimized others.

## **Mental Coordination of Perspectives as the Source of Moral Development**

Rather than biology or society, the child's mental coordination of perspectives on a situation is emphasized as the source of moral development and maturity in the cognitive developmental theories of Jean Piaget and Lawrence Kohlberg. Piaget conceptualized mature morality as the construction through social interaction of a logic or rationality inherent in social relations. Particularly relevant to moral development is the coordination of self's with other's perspectives in peer conflict situations. John Flavell and colleagues noted that social construction mitigates – but does not eliminate – egocentric bias in human development and behavior.

Mental coordination or construction may supplement internalization in moral development. The cross-cultural universality of moral reciprocity, for example, may reflect not only widespread moral internalization of a norm (as Gouldner asserted) but also the social construction of an *ideal* as children (perhaps with the help of inductive parents or teachers) interact. Piaget (1932/1965) wrote that reciprocity

as an “ideal equilibrium” is “born of the actions and reactions of individuals upon each other” (p. 318). Concrete forms of moral reciprocity (prescribing the reciprocation of favors or blows, or crude equality) precede the Golden Rule or ideal form (prescribing reciprocation according to how you or anyone would wish to be treated, or equity according to situational circumstances). Piaget suggested that the child during preadolescence gains hypothetical and reflective abilities that enable him or her to ponder the “deeper” meaning of moral reciprocity. The child may set “forgiveness above revenge, not out of weakness, but because “there is no end to revenge (a boy of 10)” (p. 323).

Cognitive developmental theorists suggest that the transition from concrete to ideal forms of reciprocity is part of a cross-culturally general age trend. Prior to moral judgments of concrete reciprocity, especially in the preschool years, children tend to center upon the superficial or highly salient in situations and accordingly confuse morality with physical size or power or with momentary egocentric desires. Through social construction, children “decenter” or become less egocentric and develop concrete and ideal moral reciprocity. As adolescents and adults mentally coordinate social perspectives in complex work or university settings, their mutualistic ideals expand from interpersonal to broader societal or humanitarian concerns.

Based on Piaget’s work are other conceptualizations. Lawrence Kohlberg proposed a six-stage model of lifespan moral judgment development, but the rarity of his highest stages meant that they were poor candidates for defining cross-culturally general moral judgment maturity. John Gibbs proposed a four-stage model of standard moral judgment development. Immature stages are: 1) superficial centerings; and 2) pragmatic exchanges (or concrete moral reciprocity). These gradually give way in childhood to mature stages: 3) mutualities (or ideal moral reciprocity); and 4) systems (or expansion of mutual ideals to represent the bases of complex social systems). The four stages define a rough age trend seen in numerous cultures, such that basic moral judgment maturity is commonly evident by the adolescent or adult years.

## Other Integrative Views

Besides Hoffman’s, other integrative views of moral development or morality are noteworthy. Gibbs offered a comprehensive view of moral development that encompasses biological, societal, and mental coordinative sources. Gibbs pointed out that Hoffman’s integrative view and Piaget’s or Kohlberg’s cognitive developmental theory refer, respectively, to the “right” and “good” strands of moral development. Similarly, Tom Beauchamp and James Childress conceptualized morality in terms of two primary principles: first, justice and respect for the person; and, second, nonmaleficence or beneficence. Although distinct, the right and the good interrelate and complement one another – as do cognitive development and Hoffman’s theories of moral development.

SEE ALSO: ► Altruism ► Effective parenting ► Empathy  
► Moral judgment ► Values

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## Moral Judgment

Charles C. Helwig  
*University of Toronto*

Moral judgment encompasses how people think about ethical or moral issues. Moral issues are distinguished from other sorts of issues, such as issues of personal choice or aesthetics, in that they entail a sense of obligation or *should* that is believed to hold for all people in similar circumstances. Depending on the theoretical perspective, morality may be defined either more narrowly or broadly to include such issues as justice, rights, and the welfare of others, laws and social customs, religious obligations, or questions of virtue or the good life.

The study of moral judgment in psychology has been conducted in the main by developmental psychologists, who have been interested in charting how thinking about morality is transformed from its beginnings in early childhood throughout adolescence and into adulthood. The field of moral judgment began in earnest with the efforts of the Swiss psychologist Jean Piaget, published in his seminal work *The Moral Judgment of the Child* in 1932. Piaget applied his clinical interview method to the study of children's moral conceptions. He questioned children of various ages about rules in children's games, and asked them to evaluate the actions of characters in stories in which children committed violations of moral rules of different kinds (e.g., property damage, physical harm, lying). From his investigations, Piaget outlined several levels in children's understanding. After an initial premoral level, in which social rules are understood merely as analogous to physical regularities without any attendant sense of obligation, children at around five years of age enter a period of *heteronomy*, in which they show a strong sense of respect for rules and authority in their moral thinking. Children at this level trace the origins of rules to authorities (e.g., usually parents) and view social rules as fixed and unalterable. When making judgments about moral actions, these young children focus on the letter rather than spirit of the law, and give greater priority to consequences over intentions.

In middle childhood, children's morality shifts to one of moral *autonomy*. Children's ability to take the perspective of the other increases and hence they become capable of reciprocal social interactions with peers. Out of these reciprocal interactions

emerges a sense of morality as reciprocity or justice, embodied in maxims such as the Golden Rule (or “do unto others as you would have them do unto you”). Correspondingly, the child’s moral judgments shift from a focus on rigid obedience to rules to a more nuanced application of morality that takes into account subjective, psychological features of acts such as the intentions of the transgressor. Older children and adolescents now understand morality in terms of true principles of justice, with rules no longer seen as good in and of themselves but only insofar as they serve these principles.

Building on Piaget’s research, the American psychologist Lawrence Kohlberg developed an extremely influential theory of the development of moral judgment from an extensive program of research that began in the late 1950s and continued until his death in the late 1980s. Kohlberg’s method involved presenting individuals with a series of moral dilemmas or conflicts and exploring their thinking through in-depth interviews. In one such conflict, known as the Heinz dilemma, a man’s wife is dying from cancer. There is a drug that can cure her. However, the druggist who invented the drug is selling it for an exorbitant price and Heinz is unable to pay. In desperation, Heinz breaks into the druggist’s store to steal the drug. To explore their moral reasoning, participants are asked a series of questions, such as whether it is acceptable for Heinz to steal the drug, and whether or not Heinz is obligated to steal even for strangers.

Kohlberg identified a six-stage sequence of moral judgment development, grouped into three broad levels, in which moral reasoning becomes increasingly abstract and oriented to general moral principles. At the first stage of the *preconventional* level, people (usually young children) reason in terms of punishment and obedience to authority. For example, individuals reasoning at this stage typically state that Heinz should not steal the drug because he may get caught and be sent to prison. In the second stage of this level, people take the perspective of others (such as the dying wife), but reason about relationships and obligations in tit-for-tat terms, arguing, for example, that Heinz should steal the drug because he needs his wife to help take care of him or do things for him in the future.

The next two stages comprise the *conventional* level, usually reached in adolescence or early adulthood. Here, people are aware of shared social or cultural norms that transcend personal wishes or desires and become the basis for moral obligation. For example, at stage 3, it may be argued that Heinz should steal the drug because it is what any good husband would do. These shared obligations, however, are mainly formulated in terms of the norms and values of the group with whom the individual identifies; they are not conceptualized as general obligations (such as a universalizable moral principle to respect all human life). Thus, there is no corresponding obligation to save the life of a stranger who is not part of one’s reference group. At the fourth stage, the individual takes the perspective of society, including societal laws and institutions and the existing social order. The vantage point here is one of maintaining existing societal laws or institutions for the purpose of preventing a breakdown of the social system and the disorder that would ensue (e.g., “If people were allowed to steal, then society would break down”).



At stage 5, the first stage of the *principled* level, the individual reasons in terms of universal moral principles that people in any society would be able to assent to. These may include notions such as the social contract, the common good, and universal human rights. Instead of the law maintaining position of stage 4, the person adopts a law creating perspective in which the focus is explicitly on the underlying principles that are necessary to legitimize a just and fair social system. Hence, at this level, individuals may perceive a conflict between existing societal laws and conventions and moral principles, and they will tend to give priority to moral principles over law or convention in such conflicts. Kohlberg initially identified a sixth stage, but later dropped this stage from his scoring system because he could not find enough examples of participants who reasoned at this stage for empirical validation. Even stage 5 was reached by only a fairly small minority of people in North American studies.

Kohlberg's stage sequence was extremely influential throughout the 1960s and 1970s, yielding a large body of evidence from both cross-sectional and longitudinal studies that corroborated the general pattern of development. However, Kohlberg's claims about moral development have sparked considerable controversy and continuing debates. For example, critics have maintained that Kohlberg's definition of morality as justice is too narrow to encompass the broad range of ideas subsumed within the term morality, or they have questioned whether his stage sequence accurately captures the morality of everyone.

One such critic is Carol Gilligan, a former colleague of Kohlberg, who took issue with Kohlberg's theory in her best-selling book *In a Different Voice*, published in the early 1980s. Gilligan noted that Kohlberg's original doctoral dissertation, upon which subsequent longitudinal investigations were based, included only a male sample. Gilligan argued that Kohlberg's definition of morality as justice, in which abstract, rights-based principles define the higher stages, is biased toward a male way of thinking and inadequate in capturing the unique features of women's moral reasoning. According to Gilligan, the reasoning of women is oriented not to rights or justice but to notions of care and interpersonal responsibility. Correspondingly, women's moral reasoning is mainly focused on the avoidance of harm in close, interpersonal relationships. However, within Kohlberg's system, these features of reasoning are relegated to stage 3, leading to an implicit bias against women. In addition, Gilligan believed that the hypothetical dilemmas used in Kohlberg's research appeal more to men, whereas women are more likely to be engaged by real life moral dilemmas related to their own personal experiences.

Gilligan proffered her own sequence of moral development, derived from research she conducted on the reasoning of pregnant women of various ages and backgrounds who were contemplating having an abortion. In Gilligan's model of women's moral development, there is an initial, egocentric focus on the self, followed by a shift to a way of thinking that entails self-sacrificial caring for others. This level is unstable and eventually leads to a synthesis of the needs of the self and those of others, resolved through the application of a generalized moral principle of nonviolence.

Gilligan's claims about sex bias in Kohlberg's theory, and sex differences regarding moral reasoning in general, received intensive scrutiny throughout the 1980s and early 1990s. Contrary to Gilligan's claims, extensive reviews of the voluminous research on moral judgment tended to show no differences in the level of moral development reached by women and men on studies using Kohlberg's measure. Evidence of sex bias appeared to be confined mainly to a few early studies that confounded sex with other variables, such as occupation and level of education. However, when men and women of the same occupational and education levels are compared, sex differences disappear. Moreover, there is little evidence that men predominately use a rights orientation in their reasoning and women use a care orientation. Instead, most studies show that men and women use both orientations in ways that depend on the particular situation. For example, more impersonal dilemmas, such as reasoning about conflicts with strangers in institutional settings, tend to pull for rights-based reasoning, whereas more personal dilemmas, such as conflicts in close interpersonal relationships, tend to elicit care-based reasoning, regardless of gender. Although most of her empirical claims about gender differences in moral reasoning have not received much support, the theoretical debates spawned by Gilligan's work did draw attention to the inadequacy of Kohlberg's theory in accounting for important aspects of moral life, such as the particular obligations of care that may operate within close personal relationships.

A second area of heated controversy centers around the cross-cultural universality of Kohlberg's stage sequence. Some critics, such as Richard Shweder, have argued that Kohlberg's theory is ideologically biased because it reflects the influence of Western belief systems such as democratic liberalism and secular humanism. At the principled level, the moral worth of the individual is abstracted from the social roles and relationships in which he or she participates, and expressed in terms of abstract, human rights held by everyone. Questions have been raised about whether Kohlberg's theory is applicable to those cultures that may define higher morality in terms of divine duties or obligations of filial piety or obedience to authority (e.g., China), or that view human dignity as residing not in an abstract human nature but rather in the position one holds within a social system, as in societies with strictly defined caste or gender hierarchies, such as India.

A fairly large body of cross-cultural evidence has accumulated exploring the universality of Kohlberg's developmental sequence, including longitudinal studies conducted in the United States, Israel, Turkey, India, Indonesia, and China. The results of these studies indicate that individuals in diverse cultures do appear to move through the first three or four stages in the order prescribed by the theory. As well, principled or post-conventional reasoning has been documented in a variety of non-Western cultures, including India and China.

However, two caveats are in order. First, studies of village populations in a variety of cultures indicate that reasoning among villagers tends to remain at stage 3, even in adulthood, and that principled reasoning is virtually nonexistent in such societies. Second, in supporting their judgments, postconventional reasoners

from non-Western cultures sometimes appeal to other principles besides the standard stage 5 focus on individual rights or social contract. For example, people from India were found to draw on concepts from indigenous religious or philosophical traditions, such as the Hindu principle of nonviolence (*ahimsa*), when taking a postconventional perspective. These sorts of responses were difficult to score within the standard stage definitions in Kohlberg's coding manual.

Contrary to certain claims of the cultural critics, however, these postconventional perspectives found within non-Western cultures did not simply equate the good with existing social arrangements, or deny the universal dignity of all human beings. Instead, postconventional reasoners from non-Western cultures applied concepts from their own religious and cultural traditions in universalizable ways, and took a critical perspective on existing social conventional arrangements when these failed to meet the demands of morality and justice – all hallmarks of the postconventional level. Nevertheless, the findings of these cross-cultural studies highlight the need to expand the definition of the postconventional level in Kohlberg's system in order to accommodate the diverse moral principles and concepts found across the world's cultures.

More recently, new perspectives have arisen based on questions about the methodological adequacy of Kohlberg's dilemma and interview approach. Kohlberg's method relies heavily on the ability of people to formulate arguments and to explicitly articulate complex notions, such as moral principles. As such, it is high on production demands and may be biased against less verbal individuals, such as young children or those without formal education. Researchers such as James Rest have devised an objective (multiple choice) measure of moral comprehension (the Defining Issues Test, or DIT), in which participants must identify from a list of statements associated with the different stages what they believe to be the most important issues that should be considered when deciding about a course of action in a moral dilemma. Studies using the DIT have generally found the same developmental pattern as Kohlberg; however, many more people score as principled on the DIT than on Kohlberg's measure. These findings suggest that comprehension measures such as the DIT may be more sensitive to principled moral intuitions held by many people who would otherwise have trouble articulating these ideas within Kohlberg's interview method.

A more extensive revision and critique comes from social domain theory, a perspective developed by Elliot Turiel in the late 1970s and early 1980s that has gained prominence in the last two decades. Turiel and colleagues have suggested that children's understanding of morality emerges neither from an initial orientation to authority and upholding existing social rules that are seen as defining the right and the good (as in Piaget's heteronomous morality), nor out of a prior stage of social convention (e.g., Kohlberg). Instead, morality is a distinct domain of social understanding that stems from children's reflections on their direct experiences with harm and unfairness.

Rather than employing complex dilemmas such as those used by Kohlberg, social domain theorists have explored children's and adults' reasoning about different

kinds of acts and rules by directly probing the basis of their judgments. In these studies, participants were asked whether a particular act (e.g., a child hitting another child or calling a teacher by his or her first name) would be acceptable if it were not punished, if there were no explicit social rule prohibiting the act, or if it were common practice in a variety of social contexts (e.g., at home, in school, in another country). Participants across a wide age span distinguished acts entailing harm and unfairness from arbitrary social customs or conventions. The former, termed *moral* acts, were seen as wrong even in the absence of punishment and explicit social rules or authority sanctions, or when commonly practiced, whereas the rightness or wrongness of violations of *social conventions* were seen as dependent on rules, authority commands, or social consensus. When making these distinctions, children and adults appealed to issues of welfare and fairness regarding the moral acts, and social order, authority, and rules in reasoning about social conventions.

Researchers working within this approach have also uncovered a domain of *personal* issues that are seen as up to individuals to decide and beyond the bounds of legitimate authority. Personal issues include recreational pursuits or personal preferences regarding food and dress, with the scope of actions seen to fall within the personal domain expanding in late-childhood or adolescence to encompass issues such as rights to privacy and more abstract freedoms such as freedom of speech or religion. Distinctions among the moral, social-conventional, and personal domains have been found in a variety of cultures, including non-Western cultures such as India, Korea, Indonesia, China, and Nigeria.

The social domain approach suggests that the social reasoning of children and adults is multifaceted and cannot be encompassed within broad orientations such as Kohlberg's or Piaget's stages of reasoning. Even young children do not view the moral in terms of what is punished or prescribed by authorities or dictated by custom, at least for some issues. It is important to stress that, although young children do distinguish morality from social convention, they do not always reason about all such issues in the same way as adults. Children's ability to apply and distinguish social domains depends on a number of factors, such as development within each of the domains and the ability to coordinate judgments in situations that entail components of different domains. For example, as children's moral thinking develops, they may be better able to perceive the moral implications (e.g., social injustice) inherent in certain social arrangements (e.g., sex-role differentiations, exclusionary practices) and to subject their society's laws and social conventions to greater moral scrutiny.

Moreover, although these distinctions are made by both children and adults, there can be disagreement both within and between cultures over the types of actions falling within each domain. For example, in the United States, adolescents sometimes define certain issues as personal (e.g., unconventional styles of dress or the cleanliness of their own room) that their parents see as social conventions and therefore within the bounds of legitimate parental authority. Within cultures, even adults may vary in whether they view some actions (e.g., homosexuality) as matters of personal choice or as linked to religious or social conventional systems

of regulation. And, across cultures, some actions that are seen as matters of personal choice (e.g., dietary preferences) may take on moral significance through their association with belief systems entailing harm to persons or supernatural entities, such as deceased ancestors. The social domain perspective stresses the complexities inherent in how individuals apply different social conceptual systems to comprehend and evaluate their social world.

Nevertheless, some psychologists, such as Larry Walker, recently have noted that research and theorizing on moral judgment remains dominated by a focus on issues such as justice and concern for others. The field has paid little attention to *eudaimonia* or self-regarding virtues, associated with normative ideas about self-development and human flourishing. Eudaimonia are often conceived as aspects of the good believed to be desirable but that are not usually thought of as subject to social regulation (unlike justice). Exploring how people reason about these virtues could broaden the field of moral judgment, open up fruitful new avenues of investigation, and strengthen potential connections between this field and the positive psychology movement.

SEE ALSO: ► Altruism ► Justice ► Moral development ► Values  
► Virtue ethics

## Motherhood

Melinda J. Key-Roberts

*University of Kansas*

*Motherhood* is most frequently defined as a set of socially constructed activities involved in nurturing and caring for dependent children. While early work on mothering focused on the quality of mothering and its effects on the child, the study of mothering has recently expanded to include the activities, understandings, and experiences of motherhood. Thus, as scholarly work on mothering shifted to focus on the person who does the child rearing, definitions of motherhood also began to broaden.

## Ideologies of Motherhood

Studies undertaken in the 1970s and early 1980s routinely reported that both men and women tend to see the mother as being more vital to the needs of young children than the father. By the early 1990s a more egalitarian approach to parenting appears to have emerged; however, it is clear that women continue to carry out more childcare and domestic tasks than their partners.

Beliefs about motherhood often reinforce traditional gender-based divisions of labor. According to Terry Arendell, in her comprehensive article *Conceiving and*

*Investigating Motherhood: The Decade's Scholarship*, the prevailing ideology in North America is that of *intensive mothering*. Proponents of intensive mothering suggest that mothering should be exclusive, wholly child-centered, emotionally involving, and time consuming. The good mother portrayed in this ideology is devoted to the care of others, often neglecting her own needs and interests. When asked to articulate their notion of what makes a good mother, women often endorse the ideal of the good mother put forward by the intensive mothering ideology.

Inconsistencies between the ideologies of motherhood and the experiences of real women are widespread. According to the good mother model, mothers should be passionate about their parental duties. In reality, however, raising a child can result in frustration, depression, and anxiety. In theory, the ideal mother is one who has a constant presence and guiding role in her child's life, putting the child's needs ahead of her own. In practice, however, achieving the ideal can pose a challenge to a woman's sense of self and desire for autonomy. Given the sometimes difficult work associated with mothering, meeting the criterion for a good mother can feel overwhelming, particularly to new mothers. In truth, mothering is a very distinctive and individual experience. For many mothers, tension between the good mother ideal and the reality of mothering is resolved by the emergence of a personal and evolving definition of a good mother.

## Maternal Psychological Well-Being

It is not unusual for mothers to feel constrained by the tasks of motherhood one moment, only to experience significant emotional rewards from parenting their children the next. While the responsibilities associated with parenting sometimes weigh heavily on mothers, they also derive great satisfaction from the powerful role they play in the positive outcomes of their offspring. For the majority of women, parenting is both challenging and rewarding. Mothers understand that they are essential to their children's identity formation and socialization. They clearly see their contribution to the care of children as extremely important and unique. Many mothers see themselves as the primary source of comfort for their children. Mothers also believe that they are more naturally attuned to children's emotional needs than other caregivers.

Assuming primary responsibility for children's day to day upbringing can be stressful. Marital dissatisfaction, economic hardship, and difficulty locating and affording childcare can all contribute to greater stress and dissatisfaction among mothers. Mothers living in crowded conditions with young children feel more overburdened than other mothers. Similarly, young mothers, especially those with multiple children, experience greater distress and have fewer psychological resources than older mothers. While popular discourse on motherhood often emphasizes the pressure and stress mothers experience, a national survey of more than two thousand mothers found that mothers generally report high levels of satisfaction with their lives. Results of *The Motherhood Study* suggest that women nearly always

tie their satisfaction with their lives as mothers to how their children are doing. In particular, mothers find satisfaction from watching children grow-up well. They also find specific satisfaction in learning from and with their children. While mothers experience more parental strain over the course of child rearing than fathers, they also report more satisfaction with parenting. As cited in Arendell's article *Conceiving and Investigating Motherhood*, mothers are generally more positive and supportive of their children than fathers, and both mothers and children report that children feel more closely attached to their mothers than their fathers.

Research indicates that maternal satisfaction and well-being increase with income and education; satisfaction and well-being are also higher for married mothers and those with high levels of religious involvement. Employed mothers who are able to locate and afford high-quality childcare, who are supported by their partners, and who have flexible workplace options also experience increased well-being. Research by Stacy Rogers and Lynn White also related parenting approach to maternal satisfaction. Specifically, they found that mothers who utilize an authoritative parenting style – characterized by warmth, autonomy, and consistency and clarity in use of discipline – report more satisfaction with parenting than those who use an authoritarian approach.

Satisfaction with social support also appears to be a key factor underlying some of the variation in maternal psychological well-being. Both quality of intimate relationships and quantity of social ties are related to mothers' satisfaction and well-being. While mothers benefit from both emotional support and practical support, differences exist along racial and ethnic lines in mothers' reliance on family and friends for childrearing assistance. In comparison to white mothers, who rely more on neighbors and friends for assistance, African American mothers rely mostly on extended family for help with childcare. In contrast to both black and white mothers, Hispanic mothers rely mostly on other household residents and less on extended family or nonrelatives.

## **Working Moms**

Over the past 30 years, maternal employment has steadily increased for all racial and ethnic groups. According to traditional definitions, a mother is expected to be her child's primary caregiver, particularly when her children are young; this emphasis on mothers as exclusive caregivers may result in feelings of loss, sadness, or guilt when mothers are separated from their children. The unique bond between mother and child may also make it difficult for mothers to relinquish care to others.

Mothering requires sacrifices in alone time, time with friends, and sleep. Many mothers also make sacrifices in their careers, by stepping off the career path or passing up opportunities for advancement. For women who continue to work following the birth of a child, the potentially conflicting demands of motherhood and employment may result in role strain. Many women struggle to balance work and family responsibilities. Employed women who are deeply committed to

their role as mother and worker may be more likely to experience role conflict, especially when the demands of both roles are simultaneous and ongoing.

The research findings of Debra DeMeis and H. Wesley Perkins indicate that full-time employed women reduce the amount of time they spend on household chores, but they do not decrease their overall range of responsibilities. Mothers in part-time and full-time paid employment spend an equivalent amount of time with their children as full-time mothers. Furthermore, employed and full-time mothers generally engage in the same childcare activities, with the exception that full-time mothers watch more educational television with their children. Overall, mothers' mental health and parenting satisfaction benefit from maternal employment. However, commitment to both work and family may result in less sleep, curtailed leisure time, and greater stress for working mothers.

When combining parenting and paid work, employed African American mothers may experience greater psychological satisfaction and less stress than white mothers. While they, like all employed mothers, must contend with role conflicts, employment rates among African American women have been higher for a longer period of time and working mothers are seen as vital to family survival. From such a perspective, the ideology of intensive (exclusive) mothering is neither practical nor desirable. As a result, racial-ethnic mothers have carved out alternative childrearing practices to those favored by white, middle-class mothers. Within the black community, raising children is not an individual undertaking; instead the honor and responsibility of caring for children is shared among sisters, grandmothers, and "other-mothers."

Working mothers use a variety of strategies to cope with the increased demands on their time and attention. Research on strategies that employed mothers use to cope with role conflict indicates that working mothers frequently modify their standards for what constitutes a good mother. Because feelings of adequacy may hinge on the relationship between the actual mothering work women perform and their perception of a mother's role, redefinition of the maternal role is critical for both employed and homemaker mothers. Working mothers who do not alter their definition of a 'good mother' may be more likely to experience dissatisfaction with their performance at work and home.

In addition to cognitively restructuring their attitudes and assessments, working mothers may also seek to emphasize the positive and downplay the negative aspects of being a working mother. For example, mothers in part-time and full-time paid employment are more likely to stress the positive outcomes of placing children in alternative care. When asked how they cope with the demands of motherhood and employment, working mothers also emphasize efficiency and organization, planning ahead, and relaxed attitudes about housework.

## Future Directions

Research on mothering and motherhood is rapidly expanding. Historically, research on motherhood has been guided by the dominant ideology of intensive



mothering. In order to fully understand the experience of mothering, however, inclusion of minority and working-class definitions and perceptions of motherhood is imperative. As more mothers join the workforce, additional information is also needed on the strategies working mothers use to meet the demands of work and family. Finally, mothers self-report of satisfaction warrants further exploration. As the primary caretaker for their children, most women encounter stress and anxiety. However, the majority of mothers also experience great joy and fulfillment in motherhood.

SEE ALSO: ► Attachment ► Subjective well-being

## Myers, David G.

Martin Bolt  
*Calvin College*

David G. Myers' integrative review of research on happiness shifted attention to the study of positive emotions and facilitated the emergence of positive psychology. His important work on subjective well-being has reached both scholarly and general audiences and has brought the field closer to understanding the core principles of human flourishing. He has provided direction to empirical work as well as guidance for fostering healthier and happier individuals, families, and societies.

Born in Seattle on September 20, 1942, Myers received his PhD in psychology from the University of Iowa in 1967. He has spent his career at Hope College in Holland, Michigan, where he is presently the John Derk Werkman Professor of Psychology. An award-winning researcher, Myers received the Gordon Allport Prize for his work on group polarization. With his wife Carol, he has established a charitable foundation endowed by royalties from his introductory psychology texts and his general audience trade books. In 2004 the David and Carol Myers Foundation endowed the American Psychological Society Fund for Teaching and Public Understanding of Psychological Science.

Myers' studies of happiness have appeared in numerous scientific and popular journals including *American Psychologist*, *Psychological Science*, *Scientific American*, and *Psychology Today*. *The Pursuit of Happiness: Who is Happy and Why* meticulously surveys research on subjective well-being and dispels popular but mistaken ideas about the factors that enable happiness. *The American Paradox: Spiritual Hunger in an Age of Plenty* explores the personal and social consequences of materialism and individualism and points the way to a communitarian synthesis of individual rights with communal need.

Myers has devoted special attention to understanding religion's positive links with well-being. Devout faith, he suggests, may offer communal support, a sense of meaning and purpose, and enduring hope. Myers has also fostered dialogue

between psychology and religion by relating central ideas about human nature found in psychological science and in religious literatures.

Many students first encounter positive psychology in Myers' best-selling psychology textbooks that are renowned worldwide for coupling scientific rigor with a warm writing style that engages both mind and heart. In addition to his multiedition psychology textbooks, Myers's articles have appeared in three dozen magazines, and he has authored 15 books. By effectively digesting psychological science for the general public, he has been a foremost leader in "giving psychology away."

In *Intuition: Its Powers and Perils*, Myers provides a comprehensive survey of recent research that demonstrates both the remarkable capacity and predictable pitfalls of the human mind. *A Quiet World: Living With Hearing Loss* explains the psychology of hearing loss and describes powerful new hearing technologies. *What God Has Joined Together: The Christian Case for Gay Marriage* explores the scientific literature on the roots of sexual orientation and demonstrates how same-sex marriage strengthens the institution for all people. Each highly accessible, provocative book couples authoritative review of the relevant research with insightful reflection on its practical implications.

SEE ALSO: ► Enjoyment ► Happiness ► Prayer ► Religiousness  
► Spirituality

# N

## Narrative Identity

Dan P. McAdams

*Northwestern University*

*Narrative identity* is the story a person constructs and internalizes to organize and make sense of his or her life as a whole. Complete with characters, plots, and other literary features learned from culture, narrative identity includes the person's reconstruction of the autobiographical past and his or her vision or plan for the future. The person's story is likely to incorporate or suggest an imagined beginning (where I came from, how I came to be), middle (who I am now, what my life is now about), and ending (where my life is going in the future, how things will turn out for me). As such, narrative identity is not so much an objective recording of past events as it is an internalized and evolving personal myth of the self, a product of autobiographical reasoning whereby the past is selected and construed in such a way as to set the stage for an anticipated future. Narrative identity integrates a life in time and provides life with some sense of psychological unity and purpose. Contemporary theorists of narrative identity argue that people living in modern societies begin to construct narrative identities in their adolescent and young-adult years as they explore the various economic, ideological, social, and psychological options that society affords for living life as an adult. Through introspection and social interaction, furthermore, people continue to work on and articulate their life stories across the adult life course, often in response to various expected and unexpected life transitions.

## The Challenge of Identity

In his famous stage model of psychosocial development, Erik Erikson described *identity versus role confusion* as a critical life challenge that first arises in adolescence. Before the teenage years, Erikson argued, people are not typically concerned with identity questions like “Who am I?” and “What gives my life unity, meaning, and purpose?” Instead, infancy and childhood are taken up with such basic psychological issues as the security of attachment bonds (Erikson’s first stage of trust versus mistrust), developing independence in the toddler years (autonomy versus shame and doubt), the Oedipal struggles of early childhood (initiative versus guilt), and the socialization challenges of the elementary-school years (industry versus inferiority). With the advent of puberty, the emergence of abstract thought, and the cultural expectations that attend the move into the teenage years, adolescents find themselves in a new psychological world – Erikson’s fifth stage of psychosocial development – wherein they are challenged to formulate a new understanding of the self that will prepare them for adult life.

For many adolescents, Erikson argued, identity construction involves questioning some of the assumptions that implicitly guided their lives as children, even rejecting mores and conventions that are now seen, from the standpoint of adolescence, as immature, authoritarian, simplistic, inauthentic, or, in some sense, no longer true to the new sense of self adolescents now feel they are experiencing. Therefore, adolescents and young adults may experiment with new ideologies (both political and religious), lifestyles, and points of view as they endeavor to figure out who they “really” are and how their lives as adults will eventually unfold. For many people living in modern industrialized societies, identity exploration is expected to run well past adolescence proper and into their 20s and 30s. The development of identity prepares the individual for the challenges of Erikson’s sixth stage – intimacy versus isolation. One is best prepared to give oneself to another in long-term bonds of intimacy if one first has established a coherent identity, Erikson argued. Identity, furthermore, paves the way for the midlife challenges of generativity versus stagnation and Erikson’s last stage of ego integrity versus despair.

Erikson described identity as a particular configuration or arrangement of the self that is designed to situate the young person in a meaningful and socially-validated niche within the adult world while integrating the person’s understanding of who he or she was (as a child), is now, and will be in the future. This configuration of self provides the person with a sense that he or she is fundamentally the same person across different situations and roles while also providing a convincing explanation, for others and for the self, of how the person came to be who he or she is now and will be later. Erikson was never especially clear, however, about just what such a configuration or arrangement of the self might look like. How is the identity configuration structured? What does it contain?

## The Turn to Narrative

In the 1980s, psychological theorists began to suggest that the configuration of identity about which Erikson spoke may look something like *a story*. Dan McAdams recast Erikson's concept of identity in narrative terms. McAdams argued that identity is, in part, an internalized and evolving life story and that identity construction in late adolescence and young adulthood is the process of developing a convincing and vivifying story of the self, a personal myth that lends coherence and meaning to a life. Emphasizing individual differences in narrative identity, McAdams suggested that people's life stories can be analyzed, classified, and categorized in terms of such dimensions as narrative tone (the overall emotional quality of the story), recurrent motivational themes (the extent to which the characters in the story pursue ends of power or love, for example), critical scenes (such as high points, low points, and turning points in the plot), central characters (what McAdams called *imagoes*, or personified and idealized images of the self), an *ideological setting* within which the plot develops, and an envisioned ending for the story (typically one that envisions how the story's protagonist will leave something positive behind – or what McAdams called a *generativity script*). McAdams's life-story model stimulated a flurry of research in personality and lifespan developmental psychology into the relations between dimensions of life stories on the one hand and such variables as personality traits, motives, and values on the other. In a broad reformulation of personality psychology, McAdams and Pals described how integrative life narratives define one of three different levels in human personality itself, layered over and influenced by Level-2 constructs, called *characteristic adaptations* (such as motives, goals, and developmental tasks), and Level-1 *dispositional traits* (such as extroversion and neuroticism). Of the three levels, narrative identity most closely and intricately links a person's life to culture.

The emergence and articulation of the life-story model of identity was part of a larger movement toward narrative theories and research in psychology and the social sciences in the 1980s and 1990s. Jerome Bruner, Theodore Sarbin, Kenneth Gergen, and others proposed that human beings are fundamentally storytellers who make meaning in life through narrative and that human lives should be viewed as psychosocially-constructed narrative texts. Cognitive psychologists began to study autobiographical memory, scripts, and narrative styles of information processing; developmental psychologists explored mother-child patterns of storytelling and the development of narrative understanding in children and adolescents; social psychologists began to conceive of situational encounters, social relationships, and even love and attachment in narrative terms; health psychologists documented the salutary effects of personal storytelling; and industrial-organizational psychologists began to write about the narratives of groups and organizations. In a landmark series of books and monographs, Josselson and Lieblich first described *the narrative study of lives* as the interdisciplinary effort to collect, analyze, and disseminate life stories, with a special emphasis on those life narrative accounts, such as those

provided by women and people of color, that have historically been marginalized or even silenced. In a related vein, psychotherapists proposed new conceptions of *narrative therapy* that explicitly detailed how therapists might aim to edit or rewrite their clients' life stories.

## Research Trends, Issues, and Controversies

Empirical psychologists have conducted many studies on how people incorporate negative life events into narrative identity. Experiences of pain, loss, failure, and human suffering may challenge people's assumptions about how the world works and what their own lives are fundamentally about. Research has suggested that individuals who are able to translate their own negative experiences into coherent stories that entail both the depth of their pain and a sense of positive closure show the best adaptation to negative experiences, the highest levels of psychological maturity, and the greatest degree of life satisfaction. Researchers have also shown that life stories featuring themes of intrinsic motivation, personal growth, and psychological integration tend to be associated with higher levels of well-being. By contrast, narrative identities that contain a large number of contamination sequences – discrete life-story scenes that begin with strong positive emotion but suddenly turn negative – tend to be associated with low self-esteem and depression.

In *The Redemptive Self: Stories Americans Live By*, McAdams described two decades of research into the narrative identities of highly generative (caring and productive) American adults. McAdams identified a common life story prototype constructed by many highly generative American adults in their midlife years – what he calls the “redemptive self”. In brief, the story follows this plot: The protagonist learns as a child that he or she is blessed or special and that the world is a dangerous place in need of help; motivated by strong moral convictions, the protagonist journeys forth into the world in an effort to make a positive difference; he or she encounters many negative experiences on the way, but many of these are transformed into positive outcomes (redemption sequences); the protagonist struggles to reconcile competing desires for power and love; at the end of the story, he or she looks forward to leaving a positive legacy for future generations. McAdams argues that the redemptive self reinforces a caring and productive life in the adult years while translating into a psychological narrative some of the most cherished and contested cultural themes in American life, such as the notion of a personal manifest destiny.

While many researchers have examined the content and structure of people's life stories, others have focused their attention on the storytelling process itself, especially as it plays out in social interaction. Researchers have documented how audiences shape the stories people tell about themselves and how different genres to self-telling develop in different kinds of situations. Research into the social construction of life stories highlights ongoing controversies in the study of narrative identity. For example, while some psychologists conceptualize narrative identity

as a broad-based story that serves to integrate a life in full, others insist that people tell many different kinds of stories about themselves and that the different accounts cannot readily be incorporated into a larger and synthetic narrative. Researchers and theorists have developed different viewpoints on a number of other important issues in the study of narrative identity. These include: 1) the extent to which a person has one life story or many; (2) the role of individual agency versus the role of situational constraints and performance norms in the construction of narrative identity; and 3) the extent to which life stories are stable versus the extent to which they change over time.

SEE ALSO: ► Possible selves

## National Institute of Mental Health

Janice E. Jones

*Cardinal Stritch University*

The National Institute of Mental Health (NIMH) is a division of the National Institute of Health. Located in Rockville, Maryland, the NIMH conducts research on the brain, mind and behavior in order to reduce the pain of mental illness and other disorders related to behavior. The NIMH is a division of the National Institute of Health which is under the jurisdiction of the United States Department of Health and Human Services. Mental disorders can occur at any age across a person's life span and it is important to note that the NIMH works with any age group. Research is an integral component of the work of the institute and through grant awards both individual and collaborative research efforts are under way which will improve the lives of people with mental illness and improve the quality of care they receive. The NIMH also performs leadership functions for research on the brain and behavior. Education and activism are also important aspects of work at the Institute. The institute disseminates information on mental illness to schools, governments, and volunteer organizations throughout the world.

In 1946 President Truman signed the National Mental Health Act which allowed the federal government to develop the NIMH. Three years later, in 1949, the NIMH was established under the umbrella of the National Institute of Health. As the institute grew it changed to meet the needs of society and the people it was serving. In the 1960s President Lyndon Johnson vowed to link scientific research to societal problems. The institute responded to this call and established centers for research on a variety of mental health issues such as suicide, family mental health, schizophrenia, children's mental health and problems associated with urban living. Additionally, in the mid-1960s alcohol abuse and alcoholism were recognized as major public health problems and again the institute addressed a societal concern and established the National Center for Prevention and Control of Alcoholism.

As technology improved and our understanding for the need for continued research into how the brain works, the NIMH has been on the cutting edge of computer-aided systems and networks that enable scientists to see into the brain and to understand its functions more fully. As such in the 1990s the institute developed the Human Brain Project which is a database of information on neuroscience that scientists around the world can access to improve the human condition. Another important contribution that the advanced technology of the computer age has provided to the NIMH is improved tracking and trends in mental illness. Increased and improved information has allowed the institute to continue to meet the needs of society and to be prepared to offer assistance in times of crisis through information dissemination, providing a network of trained workers and resources. In 2005, the worst natural disaster ever to hit the United States struck the Southeastern states, in the form of hurricanes. The NIMH sent scientists, doctors, nurses and other trained practitioners to these states to provide mental health services and emergency response care. Along with the victims of the storms, the institute provided service and care to the emergency responders. Understanding emergency responder trauma will improve training of emergency responders and mental health service providers in the future. The institute is working to ensure all people affected by a natural disaster receive the help they need to return to the life they knew before the disaster.

In 2004 the NIMH established five divisions for extramural research to address cross-disciplinary collaboration, to allow translation of new inventions from scientific discoveries and to take advantage of recent scientific breakthroughs in the field of mental health. Currently, the institute is working with other divisions of the National Institute of Health to mesh physical and mental health recognizing the interaction between the two. The causes, diagnosis, treatment and prevention of physical health related illnesses have been found to play a significant role in a person's mental health. Ongoing exploration of the interplay between physical and mental health will improve the quality of life for all people.

The NIMH is also responding to the changing demographics of the United States. As researchers and practitioners become more culturally responsive to design and evaluate treatments that meet the needs of a diverse population, the disparities that currently exist will be eliminated and everyone who needs mental health services will be able to access them. The institute is working to make research opportunities available to researchers who are interested in eliminating disparity. In addition to the disparity that exists among diverse populations and access to mental health services, researchers are also examining women, children, minority groups and the elderly.

Addressing the needs of a changing population continues to be of paramount importance to the NIMH as evidenced by recent findings of adolescents and the elderly. In 2006, researchers found that for adolescents a combination of psychotherapy and medication provided the best outcome. Other researchers focused on patients with Alzheimer's disease. The institute continues to evolve and change to meet the needs of the populations and to address the findings that



the researchers working either in the field or at the institute discover about mental health. This work helps to ensure that the public is receiving the best care available and that practitioners have the support they need to improve the lives of their patients.

## Neurobiology

Mark D. Holder

*University of British Columbia, Okanagan*

Neurobiology combines biology and neuroscience to study the relation between behavior and cells and cell circuits of the nervous system. The relation between biology and positive psychology is more than a simple correlation. In particular, experimental research suggests that enhancing one's positive psychological state causes changes in one's biology. For example, volunteers who were exposed to the virus that causes the common cold were less likely to develop a cold if they experienced experimentally-induced happiness prior to the exposure. As another example, immune functioning was enhanced after people viewed a humorous video.

The neurobiology of positive psychology has been investigated by examining the neurochemistry of the brain. One research approach has been to study the relationship between mood and serotonin (5-hydroxytryptophan; 5-HT). Serotonin is a monoamine neurotransmitter that regulates many different behaviors including sleep, appetite, arousal, and aggression. Serotonin has also been associated with different aspects of mood, including mood disorders. According to a widely accepted model of depression, when dysfunction occurs in systems that involve serotonin, symptoms of depression may be evident. This model receives support from antidepressant therapies that attribute their success in relieving symptoms of depression to drugs that increase the functional level of serotonin at synapses. Studies have assessed the relationship between serotonin and both positive and negative emotions. However, the results are not always simple and consistent. One reason for this is that serotonin is difficult to measure and consequently, researchers must often rely on indirect measures. One indirect measure of serotonin found that the strength of both positive and negative emotions is associated with decreases in serotonin. However, clinical research suggests that a decrease in serotonin is related to a decrease in positive mood, and that the administration of drugs that increase serotonin levels in the brain also increase positive mood, even in nondepressed people. This is consistent with research hypotheses and studies that claim that low levels of serotonin are linked to an absence of positive mood. However, studies using more direct measures of serotonin, obtained from blood samples, have suggested that although increases in serotonin levels are associated with increases in positive emotions, serotonin may not be clearly related to negative moods.

In addition to studies of neurochemistry, neurohormonal influences on positive psychology have also been assessed. For example, optimism and morning cortisol levels are inversely related; as optimism increases, cortisol levels tend to decrease. Cortisol is a corticosteroid hormone with several functions in the body, including that it is involved in our reactions to stressful events.

One of the most exciting new areas of neurobiology involves the use of cutting-edge technologies that allow scientists to actually see the workings of the brain in living people. These techniques, referred to as brain-imaging or neuroimaging techniques, have recently been applied to positive psychology. In one study, the brain activity was assessed in a person who had meditated for many years. This person was highly accomplished at meditating and was recognized as possessing a very high level of happiness and well-being. The researchers found that he showed an unusually high level of activity in the cells of his frontal lobes. This area is in the front of the brain just behind the forehead. Similarly, experienced meditators were able to focus their attention to increase their positive emotions and achieve what was referred to as a “blissful experience.” This state was accompanied by increased electrical activity in cells, including those in the frontal lobes. A low level of activity in this area of the brain is associated with the apathy and lack of emotional expression in patients with disorders such as schizophrenia. Interestingly, the frontal brain regions show increased activity when people hear a joke, but only if they find the joke amusing.

Future research challenges in the area of the neurobiology of positive psychology include identifying the neurobiological correlates of happiness, subjective well-being, and life satisfaction. To do this, techniques such as enzyme immunoassays (EIAs), which have been used extensively to determine the biological markers of depression, could be used. Positive and negative dispositions are not necessarily opposite anchors of a single dimension. Positive dispositions like happiness are independent of negative dispositions. For example, one study reported that family environments accounted for 22% of the variance in positive emotions, but only 2% of negative emotions. Though general and short-term measures of happiness and depression are negatively correlated, more specific and long-term measures of positive and negative affect are not. Therefore, the biological markers of depression, such as those identified with EIAs, may not be associated with happiness; happiness may have unique markers. Thus, the relation between positive psychology and biological markers of negative dispositions (e.g., erythrocytes and neurotrophins such as brain-derived neurotrophic factor [BDNF]) needs further assessment. In addition, the association between aspects of positive psychology and neurotransmitters linked to pleasure and reward (e.g., dopamine) should also be assessed. An advantage of the biological research in positive psychology is that unlike research on depression, there are fewer ethical concerns in increasing positive emotions in humans. Therefore, the causal links between positive psychology and the biological markers can be more easily determined.

SEE ALSO: ► Optimism ► Serotonin

## Neurofeedback

Donald Moss

*Saybrook Graduate School and Research Center*

*Neurofeedback* is an evidence-based behavioral therapy based on monitoring brain processes; the neurofeedback therapist displays information on brain processes to the patient, guiding the patient to modify brain activity. Neurofeedback is an extension of biofeedback, which may use electronic instruments to monitor and feed back information about diverse physiological responses, such as muscle tension, hand temperature, or respiration activity. The basic biofeedback paradigm suggests that when we provide a human being with feedback about a biological process, that feedback enables the individual to increase awareness of the process and gain conscious control.

Most neurofeedback relies on an electroencephalograph (EEG) to monitor areas of excessive or deficient brain activation, as well as more intricate patterns in brain activity, such as the coherence of EEG frequencies at two different scalp locations.

The growing appeal of neurofeedback is that it offers an evidence-based complementary therapy which is noninvasive and oriented to enhanced self-regulation. Neurofeedback therapy modifies brain function, through training and behavioral conditioning, and provides relief from many medical illnesses and behavioral problems, without the adverse effects of medication.

## History of Neurofeedback

Neurofeedback began with research by Joseph Kamiya in the 1950s and 1960s. Initially Kamiya discovered that one of his subjects could learn through EEG feedback to discriminate between alpha (slow wave) dominant and beta (fast wave) dominant brain states, and further, to produce either brain state on demand. Kamiya's research inspired the hope that human beings could voluntarily modify brain states through feedback learning, enhancing learning potential and alleviating brain-based disorders. Four decades of research since Kamiya's initial publications have shown this hope to be a realistic one, with research showing that neurofeedback can help musicians, dancers and athletes to achieve optimal performance, and can assist students to overcome attention deficits and learning disabilities. In addition, neurofeedback has been shown to assist medical and psychiatric patients in reducing the effects of a wide variety of disorders.

## Current Practice

Neurofeedback has improved in effectiveness as advances in computer hardware and software have produced more complex recording and analysis of brain activity,

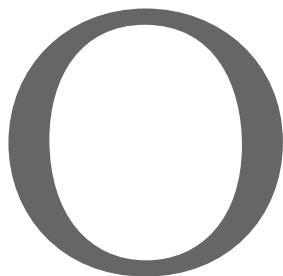
allowing nearly instantaneous feedback of derived information. Feedback can be displayed in a variety of creative ways, ranging from line graphs of the raw biological signal, to bar graphs, and to digital displays. Animations keyed to specific changes in brain activity also allow treatment for younger children who may be asked to make a skeleton dance or to navigate a maze, by changing a brain pattern in a desired direction.

Today an initial evaluation using a digitized quantitative EEG (QEEG), typically employs multisite recording and allows comparison of an individual's brain function to a normative database that contains information on thousands of individuals with known brain-based disorders. The QEEG identifies abnormalities in the electrical activity in the individual's cortex – areas of overactivation, underactivation, asymmetries between the left and right brain hemispheres, and excesses or deficiencies in coherence among brain areas. This initial brain map serves to guide the neurofeedback treatment, which seeks to normalize the abnormal aspects of the patient's QEEG.

## Documented Applications

Current research shows clinical value for biofeedback for a growing number of disorders. The two prominent organizations in the field, the Association for Applied Psychophysiology and Biofeedback and the International Society for Neurofeedback and Research have developed standards for rating the clinical efficacy of biofeedback and neurofeedback for medical and psychiatric disorders. The two associations have also sponsored a series of white papers documenting the efficacy of neurofeedback for specific disorders. To date, a white paper has appeared on neurofeedback treatment of Attention Deficit Hyperactivity Disorder (ADHD), and additional white papers are scheduled on neurofeedback for traumatic brain injury, seizure disorders, substance abuse disorders, and anxiety disorders. Already published research supports the use of neurofeedback for ADHD and learning disabilities, depression, mood disorders, anxiety disorders, seizure disorders, addictive disorders, and traumatic brain injury.

SEE ALSO: ► Biofeedback ► Complementary and alternative medicine  
► Neurobiology



## Occupational Health Psychology

Jo-Ida C. Hansen

*University of Minnesota*

The National Institute for Occupational Safety and Health (NIOSH) defines *occupational health psychology* (OHP) as a field concerned with “the application of psychology to improving the quality of worklife and to protecting and promoting the safety, health and well-being of workers.” Although OHP is an emerging specialty in psychology, the fields of counseling and vocational psychology and social, industrial-organizational, health and clinical psychology have been engaged in research and applications relevant to OHP for decades. The term occupational health psychology provides a name for the intersection of these specialties around broad issues related to the applications of psychology to prevent illness, injury and occupational stress in the workplace. Simply put, OHP is concerned with stressors that are the antecedents or predictors of stress as well as with the consequences of that stress, in other words the psychological and physical symptoms that result from stress. Another broad focus of OHP is to identify ways in which individuals can learn to tolerate or cope with stress related to their work lives.

The earliest work on stressors and stress stemmed from medical researchers who, through correlational research, noticed that psychological variables served either as predictors of health problems or as a response to physical illness (e.g., the correlation between hard-driving Type A personalities and migraines or the correlations between anxiety, anger, or depression and heart disease and high blood pressure). Other early work related to OHP came from vocational psychology where the emphasis is on improving the fit between worker characteristics – especially interests, abilities, and values – and demands of the work environment.

Vocational psychology also has a long history of counseling application designed to help people adjust to work. These interventions may be oriented towards resolving work-related or personal problems that have a negative impact on work behaviors and performance or on-the-job satisfaction.

In the 1980s, psychological disorders made the top ten list of work-related illnesses as measured by number of worker compensation claims. Not coincidentally, during the same period dramatic changes that increased the potential for a stressful workplace environment were occurring, and still are occurring. For example, the wide-spread use of technology has reduced the possibility of leaving work at the office and employees often are expected to be available 24/7; work loads in general have increased with the expectation that people will multitask; and more teamwork is encouraged which can lead to increased stress on interpersonal relationships. In addition, the number of temporary workers has increased substantially which has populated the workforce with employees that have inadequate benefits. Finally, the intersection of work and family is more complex than at any time in history with more dual career couples, increasing eldercare responsibilities for individuals who also are fully engaged in the work force, as well as continuing childcare responsibilities. As these examples suggest, many workers are exposed to stressful circumstances that can lead to emotional exhaustion. OHP is concerned with issues such as these and others that influence the health and well-being of workers.

In response to increased concerns about worker well-being, NIOSH and the American Psychological Association (APA) have collaborated on initiatives designed to introduce researchers and practitioners to OHP. Since the 1990s they have supported the development of 12 graduate training programs in OHP, sponsored 6 international conferences on occupational stress and health, founded the *Journal of Occupational Health Psychology* in 1996, and supported the organization of the Society of Occupational Health Psychology.

One of the challenges for OHP practitioners has been to convince employers that excessive stress does have an impact on the workers as well as the profitability of the company. Many chief executive officers view stress as a motivating factor that energizes workers. Psychological research shows that meeting challenges in the workplace can be rewarding and satisfying and that challenge is an important ingredient for the productive worker. However, research also shows that a fine line exists between challenges and stressors. Whereas challenge can invigorate, stressors actually act on the body in much the same way that infection does leading to poor health and often increasing the probability of injury on the job.

Two schools of thought about the cause of job stress drive the research and application in OHP. One approach examines individual differences and their relation to stress, coping and coping styles. In other words, workplace factors that are stressful for one person may not be stressful for another. This approach views developing a person's resources and coping mechanisms as a way to decrease job stress. Another approach is to study work conditions, identify those that are

stressful to most people, and then modify the environment to reduce or eliminate the stressors.

Three broad categories of workplace stressors are job demands, organizational factors, and physical conditions. A fourth category is traumatic stressors. Job or demands that can be stressors include heavy work loads or those that require more ability than the worker has; shift work that interferes with sleeping patterns, eating habits, or normal biorhythms; occupations with high interpersonal demands; repetitive or monotonous work that leads to boredom; and work that involves responsibility for the fate of others. Organizational factors that can create stress include a lack of control over work decisions; unclear responsibilities, goals and objectives; conflicting values; conflicting work and nonwork roles; faulty performance appraisals; inadequate rewards; organizational change; over- or under-promotion; job insecurity; incongruence between person and environment; dead-end jobs; inadequate supplies, assistance, budget, space, training, information or authority. Physical conditions that can create stress include excessive noise; exposure to toxins and chemicals; heat or cold; inadequate lighting; poor fitting work stations; dangerous equipment, and poor ventilation. Traumatic stressors include many of those experienced by medical personnel, police, firefighters, insurance investigators, and natural disaster workers such as death, violence, injury, and destruction of property.

Nonwork factors also can be stressors that affect workplace performance and satisfaction. These include family variables such as dual careers, childrearing and eldercare responsibilities; inadequate finances; insufficient education; and substance abuse. Individual differences variables that can have an impact on workplace adjustment include personality variables; career stage; level of self-esteem and self-efficacy; commitment to work or to an organization; and work-related interests, values and abilities. Variables that may serve as buffers to reduce the effect of job stress include social support, the use of coping strategies, healthy lifestyles, and adequate training and preparation for change and stress.

In addition to understanding the relation between the predictors and the outcomes of stress, OHP emphasizes the prevention of organizational risk factors as well as interventions to manage the stress. For example, fitness health promotion, stress management and environmental safety programs can help to foster growth and development of individuals in organizations. The integration of individual coping strategies with organizational change can help to convert stress from a negative threat to employees' well-being to a positive opportunity that challenges workers to grow and develop through the experience and to achieve success.

SEE ALSO: ► American Psychological Association ► Vocational psychology

## Reference

National Institute for Occupational Safety and Health. <http://www.cdc.gov/niosh/ohp.html>

# Open Source

Y. Joel Wong

*Indiana University Bloomington*

In its original sense, open source refers to a computer software production and development practice in which the source code is available to the public, enabling anyone to copy, modify, and redistribute it for free. More recently, the meaning of open source has been expanded to include any practice characterized by open and heterogeneous membership, community ownership, convergence of producer and consumer statuses, egalitarianism, and large-scale peer review. Applications of the open source concept include diverse areas such as books and encyclopedias, educational practices, journalism, and psychotherapy. Open source is important in positive psychology because it can be characterized as a positive community practice that spurs innovation.

## History

The open source movement emerged in tandem with the Internet explosion in the 1990s. In contrast to traditional commercial software companies that use copyright laws to safeguard the rights of the innovator, several open source software projects released their source codes and harnessed the Internet to enable hundreds of volunteer software developers to make improvements to their software. The open source movement attained prominence on April 7, 1998, when a group of influential software developers gathered in Palo Alto for a summit to discuss ways to increase the use and acceptance of open source practices, especially among commercial businesses. The summit generated a significant amount of interest from the media, resulting in the introduction of term open source to the general public.

## Applications

Historically, open source refers to computer software development practices. The source code of an open source software is available to anyone for free to encourage others to make improvements to the software. Contributors to open source projects are allowed to freely distribute the software on condition that their recipients also receive the source code for free. Examples of open source software include *Linux* (an operating system for personal computers), *Sendmail* (an Internet mail utility) and *Apache* (a widely used web server).

Other applications of the open source concept have emerged in recent years. Open source online books (e.g., *Wikibooks*) and encyclopedias (e.g., *Wikipedia*) have



become popular because of wiki technology that enables website visitors to easily add, remove, and edit existing content. Open source educational practices often involve online forums where educators share, download, and modify educational materials (e.g., see Open Source Schools at [www.opensourceschools.org](http://www.opensourceschools.org)). Open source journalism refers to forms of online journalism where a diverse group of citizen journalists contribute to the reporting of news rather than relying on a professional journalist. Some scholars have suggested that the open source concept can be applied to psychological practices such as the collaborative development of innovative therapeutic practices by a diverse group of scholars and therapists.

## **Characteristics**

At its core, an open source community is one that is open to anyone who wishes to contribute to the development of a product that is generally available to anyone. In addition, open source communities tend to have the following features:

### **Heterogeneous Membership**

Because open source communities are typically open to anyone who is interested in contributing to their projects or using their products, they tend to be large and attract members with varying degrees of skill and reputation. For example, in the development of open source computer software, it is not uncommon to have hundreds of volunteer software developers testing, examining, and fixing bugs for a computer program.

### **Community Ownership**

Typically, anyone can join an open source community or use, modify, or distribute its products for free. No single person owns the rights to the products. Instead, a sense of community ownership is fostered in an open source community.

### **Convergence of Producer and Consumer Statuses**

In traditional commercial industries, producers and consumers perform distinct roles: producers develop a product for sale while consumers pay for its use. In open source communities, consumers who have an interest in using a product may also contribute to the development and distribution of that product, thus blurring the traditional boundaries between consumers and producers.

### **Egalitarianism**

An open source community tends to lack formal authority or control. Although an open source project may be initiated by a specific individual or organization,

anyone, regardless of status or skill, has the right to make changes to a given product.

### Large-Scale Peer Review

In an open source community, modifications to a product are subject to peer review not unlike the process in an academic community, although on a much larger scale. Modifications to products are constantly and quickly evaluated by members of the open source community.

## Potential Benefits

The development of a product in an open source community has the following potential benefits: cost; innovation and flexibility; speed; and meritocracy.

### Cost

A critical advantage of open source is the availability of low-cost technology transfer. Costs related to intellectual property rights, e.g., copyright, are eliminated in favor of community ownership and free exchange of information.

### Innovation and Flexibility

The pooling of large, diverse contributions from members of an open source community coupled with the constant flow of ideas and feedback facilitated by the Internet often leads to innovation. In addition, members of the open source community can modify a given product to fit their own needs, resulting in tremendous flexibility and multiple versions of the product.

### Speed

A product developed in an open source community has the potential to develop much faster than in traditional projects because of a much larger group of contributors. Moreover, improvements to a product are freely made available to all members of a community, thus allowing members to rapidly build on each other's work.

### Meritocracy

In traditional organizations, the contributions of certain members may be recognized or favored on the basis of their rank (e.g., the Chief Executive Officer of a company) or affiliation (being the spouse of the boss) rather than on the basis of their skills. Because of the lack of a formal hierarchy, open source communities

are more likely to operate on meritocratic principles; members' contributions are recognized by other members on the basis of their skills.

SEE ALSO: ► Organizational psychology

## Open-Mindedness

Blaine J. Fowers

*University of Miami*

Open-mindedness makes it possible to make something of new experiences, learn from errors and blind spots, and engage productively with those who are different from oneself. The capacity for open-mindedness is essential for living a fully human life, as, in the course of living, individuals inevitably encounter new experiences, discover shortfalls in their knowledge and abilities, and confront others who present different views and practices.

The understanding that open-mindedness is necessary for living the best kind of life (flourishing) has led some authors to see it as a virtue because virtues are the character strengths that make it possible to flourish. Peterson and Seligman (2004) call "open-mindedness a strength of character" that involves "the willingness to search actively for evidence against one's favored beliefs, plans, or goals, and to weigh such evidence fairly" (pp. 144–145). If open-mindedness is seen as a virtue, it must have cognitive affective, motivational, and behavioral elements, and be practiced with wisdom, each of which is outlined below.

Open-mindedness is the character strength that comes into play in situations in which one confronts the limits of one's knowledge and experience. Therefore, the key cognitive element of open-mindedness is the understanding that these limits are an inescapable feature of the human condition. Open-mindedness requires an appreciation of the multiple sources of these limits, which include the finite quality of human knowledge and experience, the natural biases to which humans are subject (e.g., ingroup bias), the power of custom and well-worn practice to narrow one's perceptions, self-deception, and the possibility of ideological distortions. In the absence of this knowledge, it is difficult to practice open-mindedness because all of these limiting factors can lead one to see one's viewpoint as complete and beyond the need for correction and expansion. On reflection, it is clear that no human can have an error-free perspective, so open-mindedness is a way to grow and expand one's world. With respect to diversity, "knowledge about cultural matters helps to elevate naïve goodwill to a solid capacity to reach out to others across cultural differences" (Fowers & Davidov, 2006, p. 587).

Individuals are motivated to exercise open-mindedness by the recognition of the limits of their knowledge and their curiosity about what they do not understand. In other words, one wants to be receptive to influence because it provides

a way to grow, learn, and overcome error and limitation. This motivation fosters an affective attunement to open-mindedness such that open-minded individuals embrace opportunities to expand their knowledge gladly. Receptivity to what is outside one's experience is spontaneous. One of the key differences between a virtue and a sense of obligation is that "individuals of character are spontaneously drawn to the good" which "encourages the best kind of desires" and actions in the service of that good (Fowers, 2005, p. 45). Of course, obligatory open-mindedness is better than none at all, but the best expression of this capacity occurs as a kind of second nature.

Open-mindedness is not just an internal experience; it manifests behaviorally as well. This involves communicating directly and consistently that one is interested in alternative points of view, that one is comfortable with differences, and that one actually takes steps to expand one's knowledge. Individuals can exercise open-mindedness occasionally or as a settled habit. Having the character strength of open-mindedness would manifest in consistent behavioral expressions of receptivity to influence.

Aristotle famously describes virtue as a mean between deficiency and excess. In the case of open-mindedness, the deficiency-excess dimension could be termed the degree of *receptivity to influence*. (One cannot have too little or too much of a virtue or it ceases to be a virtue. Therefore, the question is not how open-minded to be, but rather how much receptivity to influence constitutes beneficial open-mindedness.) A deficiency of receptivity to influence would be close-mindedness, which can be motivated by a self-protective fear or a self-certain arrogance. An excess of receptivity to influence would occur when one accepts influence from other perspectives willy-nilly, without due deliberation and respect for one's own viewpoint.

Open-mindedness involves a midrange of receptivity to influence such that one remains attached to one's own standpoint even as one allows it to come into question. The most productive form of open-mindedness occurs when genuine dialogue takes place. Dialogue goes beyond an exchange of ideas to engage individuals and groups in a process through which they actively question their own standpoint in light of what the dialogue partner brings to the conversation. Dialogue partners include each other in their ongoing self-exploration and learning, which can result both in greater appreciation for the other and in greater self-understanding. Sometimes, open-minded dialogue results in the accepting influences from the other through coming to recognize key areas of human fallibility such as limited knowledge, self-deception, or ideological blindness.

Open-mindedness allows individuals to expand their knowledge because they recognize that their understanding is limited. Fallibilities of knowledge and ability are endemic to humans and tend to be self-perpetuating. Open-mindedness provides a pathway for exposing self-deception and ideology because alternate perspectives are not subject to the same biases. It is crucial to human flourishing because limitations and blind spots are inescapable and can seriously constrain

individuals who are not open to having them questioned. Open-mindedness is therefore necessary for learning and growth, which are key elements in human flourishing.

Although open-mindedness is often extremely valuable, there are times when dialogue leads one to better appreciate one's own deepest commitments with less acceptance of influence. This makes it clear that decisions about how and when to exercise open-mindedness must be made wisely. One must be able to recognize what actions constitute beneficial open-mindedness in a given circumstance. Practical wisdom guides the individual in understanding how much authority to grant to a dialogue partner, and the degree to which one's own standpoint might be erroneous or misguided. To give a few examples, wisdom illuminates areas in which one's perspective seems problematic through leading to undesirable consequences, repetitive errors, undue limitations, and so forth. Seeking input from alternative viewpoints is desirable in such cases. In contrast, wise individuals would also recognize situations in which others are seeking to impose undue influence through manipulation, coercion, or obfuscation and eschew such bids for influence. The judicious exercise of open-mindedness provides an essential corrective to human fallibility.

SEE ALSO: ► Flourishing ► Virtue ► Wisdom

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## Optimism

Michael F. Scheier<sup>a</sup> and Charles S. Carver<sup>b</sup>

<sup>a</sup>*Carnegie Mellon University*; <sup>b</sup>*University of Miami*

Optimists are people who expect good things to happen to them; pessimists are people who expect bad things to happen to them. Folk wisdom has long held that this difference among people is important in many aspects of living. In this case, folk wisdom appears to be right. Optimists and pessimists differ in ways that have a big impact on their lives. They differ in how they approach problems, and they differ in the manner – and the success – with which they cope with adversity. These differences have important implications for their psychological and physical well-being.

## The Centrality of Expectancies

The concept of expectancy is pivotal in understanding optimism. Defining optimism and pessimism in terms of expectancies creates a link to expectancy-value theories of motivation (some of which date back to the first few decades of the twentieth century). Expectancy-value models assume that behavior occurs in order to attain desired values or goals. If engagement of effort is to occur, there must be a goal that matters enough (has enough value) to try to reach it. The other element in the equation is expectancy: confidence or doubt that the goal can be obtained. If the person lacks confidence, again there will be no action. If the person loses confidence along the way, action will stop. Only when confidence is sufficiently high do people act and remain engaged in goal-directed efforts. Of the two elements in expectancy-value models, it is the expectancy component that matters in discussing optimism.

Expectancies exist at many levels of generality. A person growing old can have a variety of different expectancies. The person can have an expectancy about being able to move her fingers enough to tie her shoes when getting dressed, an expectancy about still being able to drive to the hair stylist to get her hair cut, as well as an expectancy about living a fulfilling life for several more years. Presumably, the principles in expectancy-value theories pertain equally well to expectancies that are specific in nature and expectancies that are more general. They should even apply to the most general kinds of expectancies, those that characterize optimists and pessimists. The “confidence” that is at issue is simply broader in scope, relevant to a larger class of situations and behaviors. From this perspective, optimism and pessimism are simply broader versions of confidence or doubt, pertaining to most situations in life rather than just one or two.

## Effects of Optimism on Well-Being

### Measuring Optimism

Research on the effects of optimism has flourished over the past 20 years. This research has taken several different routes to assessing optimism, leading to somewhat distinct literatures. One approach measures expectancies directly. Some researchers who take this approach ask respondents about their expectancies in *specific situations*, trying to sample from as many domains of life as possible. An optimism score is then derived by adding responses to the particular items. Others do not ask about particular situations, but rather ask people whether they think their outcomes will be good or bad *in general*, by asking people to respond to statements such as “I’m optimistic about my future.” The advantage of this approach is that a shorter scale can be used to assess optimism, thereby making it easier for respondents. In addition, scales that sample particular domains run the risk of not including all domains that are important. On the other hand, if a researcher

is only interested in one specific domain, it might be better to assess expectancies in that domain directly, and not use a measure of generalized optimism at all.

Another, quite different, approach to assessing generalized optimism derives from work on attributional style. The idea behind this approach is that people's expectancies for the future stem from their interpretations of the past. Explaining bad outcomes in terms of causes that persist into the future and influence a broad range of events implies pessimism. This explanation carries the implication that negative outcomes will continue to occur in the future. The opposite attributional style, explaining negative events in terms of causes that are more time limited and narrower in their effects, implies a more optimistic orientation.

Researchers who work on optimism often refer to optimists and pessimists as though they were distinct groups. However, this usage is a verbal convenience. All approaches to the measurement of optimism provide scores that vary continuously across large numbers of people. Thus, people actually range from very optimistic to very pessimistic, with most falling somewhere between.

Historically, researchers have viewed optimism and pessimism as comprising of a single, bipolar dimension. From this perspective, pessimism is simply the opposite of optimism. Most people working in the field still continue to construe optimism and pessimism in this fashion, and analyze their studies accordingly. However, a growing number of researchers are exploring the possibility that optimism and pessimism are somewhat distinct constructs. This view is consistent with the fact that scales of generalized optimism are often shown to be comprised by two separate components – one measuring the person's expectancies for positive outcomes and one measuring the person's expectancies for negative outcomes. It remains unclear how questions involving the structure of optimism and pessimism will be resolved.

## Psychological Well-Being

Dozens of studies have been conducted examining relationships between optimism, pessimism, and distress among people undergoing adversity of one type or another. The stressors studied have varied widely. Studies have examined the experiences of students entering college, employees of businesses, and survivors of missile attacks. Studies have measured the reactions of people caring for cancer patients and people caring for patients suffering from Alzheimer's disease. Research has examined experiences of people dealing with medical procedures such as childbirth, abortion, coronary artery bypass surgery, and attempts at in vitro fertilization, as well as heart and bone marrow transplantation. Other studies have looked at how people deal with a diagnosis of cancer, the pain of arthritis, and the progression of AIDS.

The results of these various studies all point in the same direction: Optimistic persons experience less distress during times of adversity than do pessimists. This conclusion holds for studies that are cross-sectional – that is, that assessed optimism and distress at the same point in time. This conclusion also holds true for studies

that are prospective – that is, that assessed optimism and distress at some baseline and then reassessed distress later in time. The results of the prospective studies are particularly important, in that they suggest that optimism is associated with beneficial changes in distress over time. Thus, these prospective studies also help to get around the potential problem inherent in cross-sectional research of confounding optimism with subjective well-being.

### Optimism, Pessimism, and Coping

If optimists experience less distress than pessimists when dealing with difficulties, is it just because optimists are cheerful? Apparently not. If so, optimism would not predict *changes* in distress over time, which findings from prospective studies show it does. There must be other explanations. One possibility, now thoroughly explored, is that optimists and pessimists differ in the way in which they react to and cope with adversity. In many ways, the work relating optimism to coping simply provides a more detailed depiction of the broad behavioral tendencies that were used to characterize optimists and pessimists earlier in this entry. That is, people who are confident about the future continue trying, even when it's hard. People who are doubtful try to escape the adversity by wishful thinking, they employ temporary distractions that don't help solve the problem, and they sometimes even stop trying.

Such differences in coping have emerged in a number of studies. The majority of these studies have examined different types of patient populations or people undergoing different types of medical procedures. The findings from these projects suggest that optimistic people differ from pessimistic people in a number of ways, in terms of both their situational coping responses and their general, more stable coping styles. Some of the major differences are summarized in Table 4.

The studies on coping help to establish that optimists cope differently to pessimists. However, they do not show that these differences in coping tendencies are responsible for the differences seen in psychological well-being. Perhaps both the psychological outcomes and the coping findings are being driven by some third unmeasured variable. Fortunately, a number of prospective studies have contained measures of coping tendencies in addition to measures of well-being. This

**Table 4** Differences in the Coping Tendencies of Optimists and Pessimists.

<i>Optimists</i>	<i>Pessimists</i>
Seek information about the problem	Suppress thoughts about the problem
Plan and use problem-focused coping	Engage in self-distraction tactics
Use positive reframing	Focus on their distress
Try to find benefits in their adversity	Use cognitive and behavioral avoidance
Use humor	Overtly deny that the problem exists
Try to accept the reality of their situation	Give up trying to cope with the problem



allowed researchers to examine whether the differences they observed in well-being were mediated by differences in coping. This body of research has consistently shown that psychological well-being and coping responses are linked. Thus, optimists receive better psychological outcomes than pessimists in part because of the differences between them in coping.

### Physical Well-Being

Much more is known about the effects of optimism on psychological well-being than is known about the effects of optimism on physical well-being. Still, a number of studies have explored links between optimism and physical health, and between optimism and aspects of physiological functioning. The findings from this research mirror those just presented with respect to psychological functioning: Optimistic persons typically show better outcomes. In this case, they show signs of better physical health or signs of more adaptive physiological responses when under adversity than do persons more pessimistic in orientation.

For example, compared to pessimists, optimists report fewer physiological symptoms during times of duress and maintain a higher health status across their lives. Other studies show that optimists are less likely to suffer negative medical side effects from major surgery or to be rehospitalized within the first few months after major surgery. They are also more likely to benefit longer from the effects of their surgery. In a similar vein, less pessimistic persons have been found to outlive more pessimistic persons when diagnosed with a life-threatening illness such as recurrent cancer. They also exhibit less extreme cardiovascular reactivity during the course of their daily lives. On a somewhat different note, optimists tend to show signs of more adaptive immune functioning than do pessimists, but the evidence on this point is a bit more mixed than the other physical health outcomes that have been examined.

### Health-Promoting and Health-Damaging Behavior

As noted, extensive research has documented that optimists and pessimists cope differently with stress and that these differences in coping are partly responsible for producing beneficial psychological outcomes for optimists. In part, coping differences may also be responsible for the more beneficial physical health outcomes as well. The studies making this case involve reactions to particular health threats or illness episodes. As a group, these studies demonstrate that optimists are more likely than pessimists to face health threats head-on, and do whatever they can to improve the situation they are confronting. In this respect, the behavior seems to reflect problem-focused coping, an attempt to engage in proactive processes that promote good health and well-being.

For example, following coronary artery bypass graft surgery, optimistic patients are more likely than pessimistic patients to enroll in cardiac rehabilitation programs and to take vitamins and eat low-fat foods. Optimistic patients are also more

likely to benefit from cardiac rehabilitation programs than are pessimistic patients. In a similar vein, HIV-negative gay men who are optimistic report having fewer anonymous sexual partners than those who are more pessimistic in outlook, suggesting that optimists are making efforts to reduce their risk, safeguarding their health. Finally, optimists are more likely than pessimists to seek out information about risk factors for major diseases.

Optimists appear to take action to minimize health risks. They do not simply stick their heads in the sand and ignore threats to well-being. They attend to risks, but do so selectively. They focus on risks that are applicable to them and relate to potentially serious health problems. If the potential health problem is minor, or if it is unlikely to bear on them, their vigilance is not elevated. Optimists appear to scan their surroundings for threats to well-being but save their behavioral responses for threats that are truly meaningful.

If optimists face health threats head-on and try to do as much as they can to make themselves less vulnerable to poor health outcomes, pessimists do just the opposite. It was noted earlier that pessimists tend to give up when confronting serious problems in life. Giving-up can become manifest in ways that have negative health consequences. For example, giving up may underlie various forms of substance abuse, such as excessive alcohol use, which is often seen as an escape from problems. This suggests that pessimists should be more vulnerable than optimists to maladaptive behavior of this type. Evidence supports this reasoning.

Clearly, giving up can be reflected in many ways. Alcohol dulls awareness of failures and problems. People can ignore problems by distracting themselves with other activities. In other cases, though, giving up is more complete. Sometimes people give up not just on trying to deal with the problems they are confronting, but on their lives, by suicide. Some are more vulnerable to suicide than others. It is commonly assumed that depression is the best indicator of suicide risk. But pessimism is actually a stronger predictor of this act, the ultimate disengagement from life.

## **Is Optimism Always Better Than Pessimism?**

The evidence suggests optimists are better off than pessimists. They are less distressed when times are tough, they cope in ways that foster better outcomes, and they're better at taking the steps necessary to ensure that their futures continue to be bright. Although there are situations in which optimists are only slightly better off than pessimists and probably some where they have no advantage, there is remarkably little evidence that optimists are ever worse off than pessimists.

Several theorists have suggested that such situations do exist, that optimism may be potentially damaging. The logic is this: Too much optimism might lead people to ignore a threat until it's too late, or might lead people to overestimate their ability to deal with it, resulting in poorer outcomes. As previously noted, this appears to be generally not the case. However, occasional studies do suggest adverse effects of optimism. For example, there is some evidence that optimism predicts poorer

immune response under relatively high challenge and that the buffering effect of optimism reverses when life stress accumulates over time. In addition, cross-cultural work suggests that optimism and pessimism may function quite differently in different cultural groups. Findings such as these suggest that some caution is warranted in concluding that optimism is invariably beneficial.

## Development of Optimism

At present, not much is known about the origins of optimism, but the determinants must necessarily fall into two broad categories – nature and nurture.

On the nature side, the available evidence suggests that individual differences in optimism-pessimism are partly inherited. The evidence comes from twin studies, in which the similarity between identical and fraternal twins is compared. The available evidence suggests that between 25% and 30% of the variability in optimism is due to genetic factors, depending on how the estimate of heritability is made. Thus, at least some of the differences in optimism and pessimism among people are due to genetic influence.

On the environmental side, it makes sense to suggest that prior experience with success and failure might play a role. Prior success breeds anticipation of future success, and prior failure should create the expectation of future failure. Consistent with these ideas, research has shown that childhood socioeconomic status (SES) predicts adult levels of optimism and pessimism, even when adult levels of SES are taken into account. Children from low SES families, who presumably experience more failure experiences and who have fewer opportunities to be successful, grow up to be more pessimistic in outlook.

Children might also acquire a sense of optimism (or pessimism) from their parents, a possibility supported by at least some twin studies that show that shared environment is also an important determinant of optimism. Parental transmission of optimism could occur indirectly through the expression of optimistic or pessimistic thoughts, or by modeling appropriate or inappropriate behavioral responses to adversity. Parents might also influence their children more directly by instructing them in problem solving. Parents who teach adaptive coping skills are likely to produce children who are more successful. Thus, the basis for an optimistic orientation to life is provided. The idea that optimism is somewhat malleable has spawned a treatment approach, called *learned optimism*. In essence, this approach tries to reduce a person's level of pessimism by altering the person's tendency to process information in a pessimistic way.

## Future Directions

Extensive work on optimism and pessimism has been done over the past two decades. Still, more work is needed. In this regard, more research is needed to help answer

questions about the structure of optimism and pessimism – whether optimism and pessimism are bipolar in nature or constitute separate constructs. More research also needs to be done on the developmental antecedents of optimism and pessimism, especially on the environmental side. In addition, the field needs to investigate more thoroughly the influence of optimism and pessimism on physical well-being. Assuming that this link is made, studies will also then be needed to identify the biophysiological mechanisms that produce differences in physical well-being. Finally, although the field has started to make progress in the intervention area, there is still a way to go. Greater effort needs to be made to develop interventions that allow pessimistic persons to deal more effectively with the adversity of life.

SEE ALSO: ► Learned optimism ► Attribution theory ► Coping  
► Well-being

## Organizational Psychology

Roni Reiter-Palmon, Marcy Young Illies, and Joseph M. James  
*University of Nebraska-Omaha*

Positive organizational psychology is characterized as the application of positive psychology principles to the study of organizational phenomena. While positive psychology focuses on the study of positive emotions and traits at the individual level, positive organizational psychology focuses on using knowledge from positive psychology to enhance the experience of work.

A useful framework to understand positive organizational psychology phenomena is to look at person-, process-, and outcome-oriented domains. Specifically, a *person domain* refers to a positive state of mind experienced by organizational members (e.g., intrinsic motivation or job satisfaction). A *process domain* is a construct or intervention intended to positively affect organizational members (e.g., transformational leadership or job enrichment). An *outcome domain* refers to the positive results organizations seek to elicit from organizational members (e.g., creativity or team collaboration). While all three domains are important in the context of positive organizational psychology, this review will focus primarily on the process and outcome domains, as those are unique to positive organizational psychology. Specifically, from the process domain, leadership will be reviewed, while creativity and team collaboration will be the outcome domains reviewed.

Implicit to the person-, process-, and outcome-domain framework is the existence of interrelationships across the domains. Specifically, process domain constructs or interventions may have a direct influence on outcomes, for example, leadership may directly influence team collaboration and creativity. These constructs or interventions may also have an indirect influence on outcomes by way of person domain constructs, for example, leadership may affect follower job satisfaction. Equally so, person domain constructs may influence outcomes exclusive of any explicit process interventions such as the relationship between

intrinsic motivation and creativity. Additionally, positive outcomes may be influenced by the outcomes from other domains as exemplified in the relationship between team collaboration and creativity. In other words, constructs across the three domains may influence or be influenced by the other two domains, either independently or in combination.

## Leadership

Leadership is of relevance to positive organizational psychology due to the broad range of influence leaders have on organizations and organizational members. Leadership can be a vital part of an organization's success. Leaders can create a positive work environment in numerous ways, such as paying attention to employees' needs, empowering employees to fulfill these needs, and providing a positive role model. Many of these leadership practices are captured in the transformational and charismatic leadership models.

House defined the charismatic leader as a leader who typically has a combination of dominance, self-confidence, need for influence, need for conviction, and that they use these characteristics to articulate goals, provide a role model, motivate others, demonstrate confidence, and build his or her image. The effect of these characteristics is seen by the effect on followers. Followers of charismatic leaders exhibit trust in and affection to the leader, identify with the leader, are emotionally involved with the task, adopt the goals of the leader and show confidence in completing the task.

Similar to charismatic leadership, transformational leadership also addresses the leader's relationship with the follower. Transformational leadership is defined through its four components: a) idealized influence – the leader is charismatic, admired, and followers identify with him or her; b) inspirational motivation – the leader motivates and inspires followers by providing significance to work; c) intellectual stimulation – the leader supports creativity and innovation and promotes intelligent thinking; d) individualized consideration – the leader treats follower as individuals and tries to pay attention to each individual and their needs.

While some argue that there are differences between charismatic and transformational leadership, others suggest that there is a large degree of overlap. Research on charismatic and transformational leadership tends to focus on the positive influence these leadership styles have on organizations and followers. For example, Zaccaro and Banks suggested that transformational and charismatic leadership could create a positive work environment by creating a positive vision for which the organization strives to achieve. House stated that charismatic leadership influences subordinates to accept this vision by establishing a bond with leader and followers.

Using the framework presented previously, transformational and charismatic leadership, exemplifying the process domain can influence the person and outcome domains of positive organizational psychology in a variety of ways. Trans-

formational leadership was found to be related to person-domain constructs such as follower job satisfaction and motivation as well as positive job perceptions. Additionally, transformational and charismatic leadership are linked to several positive organizational outcomes. Transformational leadership was found to positively influence project team performance, organizational commitment, and creativity.

## **Creativity**

Today's ever-changing markets coupled with job changes due to outsourcing, have caused an increase in the demand for employee creativity. In addition, creativity is no longer limited to a subset of positions. This surge in the need for creativity has made it an important component for organizational success. Creativity is relevant to the present discussion of positive organizational psychology because it represents an outcome domain of positive organizational psychology. As such, creativity is somewhat dependent upon the process- and person-domains.

Researchers define creativity as something that is novel and of value. Woodman, Sawyer, and Griffin suggested that from an organizational perspective, creativity is typically a subset of innovation. Innovation is viewed as the act of implementation and actually using the creative idea, whereas creativity focuses mainly on the idea development stage.

Models of organizational creativity suggest that creativity can be developed at an organizational level, a group level, and an individual level. As an outcome, creativity is affected by factors from the person and process domains of positive psychology, as well as other outcomes. At the individual level, creative people have been known to apply the appropriate cognitive process, have domain relevant knowledge, have intrinsic motivation to engage in the task, and are independent, persistent and open to experiences. Factors that affect these variables are known to effect creativity, such as job enrichment programs that increase job challenge and intrinsic motivation, or training programs that are designed to increase the application of cognitive processes. This indicates the importance of the process domain of positive organizational psychology for fostering creativity in organizations.

The workplace environment also plays a critical role in facilitating or hindering creative performance by individuals and groups. Research on organizational climate has found that organizations that are able to provide environments compatible with creative individual needs improve creativity. Creative climates that promoted freedom, risk-taking, openness, and trust had more creative employees. Leadership, a process variable, has been found to affect creative performance directly through the support of the leader, as well as through the development of an organizational and group climate that supports creativity. Process domains of positive organizational psychology related to group-level creativity may be team-building activities designed to enhance trust among team members in order to foster the open exchange of ideas.

## Team Collaboration

Research on team functioning has focused on many aspects of team behavior that are negative in nature such as conflict, social loafing, team member dominance, misunderstanding or lack of communication, groupthink, and lack of resource or information sharing, to name a few. Further, when team collaboration or cooperation is studied, it is typically in the context of the factors that hinder collaboration. It is also important to study what does work when teams work together. Positive team collaboration is an important aspect of positive organizational psychology. Team collaboration is viewed as part of the outcome domain, and similar to creativity, it is affected by factors from person, process and outcome domains.

Person-domain factors include motivation and willingness to work in a team and commitment to the team. Team cohesion is the direct result of individual team member commitment to the team. Team cohesion further enhances member satisfaction from team interaction and these factors increase the likelihood that team members collaborate and work together.

The process domain includes several possible interventions that may facilitate team collaboration. For example, research suggests that shared mental models lead to better collaboration, as team members have a shared understanding of the task and expected behaviors. Training can be used to facilitate the development of these shared mental models. Team composition variables, such as homogeneity or diversity of team members, can also influence collaboration. Diversity can be defined as surface-level, focusing on social categories such as gender or race, or deep-level, reflecting diversity in education, experience, personality, and values. Research on team diversity suggests that deep-level diversity can facilitate some aspects of team collaboration such as information sharing and creative problem-solving, however, research has also suggested that diverse teams are not always beneficial. To facilitate the attainment of the benefits associated with diverse teams, interventions that improve group process and collaboration skills as well as develop a group identity have been suggested.

One can view the process domain (leadership) and outcome domains (creativity and team collaboration) as a means to influence employees in order to elicit positive organizational outcomes. Implicit in this is the goal of enhancing organizational members' well-being, which fits within positive psychology in general. One final point should be mentioned, the intent here is not to argue for enhancing organizational member well-being solely in the pursuit of positive organizational outcomes. Rather, the intent is to illustrate the benefits of putting people first within an organization.

SEE ALSO: ► Charisma ► Creativity ► Job satisfaction ► Leadership  
► Positive organizational behavior

# Oxytocin

C. Sue Carter

*University of Illinois at Chicago*

Oxytocin is a small peptide molecule, made primarily in the brain, and with a major functional role in mammalian sociality. Oxytocin was probably pivotal in permitting the evolution of the human nervous system by facilitating the birth process and protecting the fetal nervous system during the birth. Oxytocin also facilitates milk ejection and thus lactation, which is the defining feature of Mammalia. Lactation in turn allows the birth of immature infants, permitting post-natal cortical and intellectual development in young that are dependent on their mother as a source of both food and caregiving.

Oxytocin also sits at the center of a neuroendocrine network that coordinates social behaviors and concurrent response to various stressors, generally acting to reduce reactivity to stressors. Oxytocin tends to decrease fear and anxiety, and increase tolerance for stressful stimuli. At the same time oxytocin appears to encourage various forms of sociality including maternal behavior, social contact and social bonds, and even “trust.”

Oxytocin is released and works in conjunction with a related neuropeptide known as vasopressin. Vasopressin is structurally similar to oxytocin, differing by only two of nine amino acids. The genes regulating the synthesis of these peptides are on the same chromosome and are modifications of a common ancestral gene. The similarity of the oxytocin and vasopressin molecules also allows them to influence each other's receptors. The actions of oxytocin and vasopressin are often – but not always – in opposite directions. Oxytocin reduces behavioral and autonomic reactivity to stressful experiences. Vasopressin, in contrast, is associated with arousal and vigilance.

Various brainstem neural systems, including those that rely on peptides such as oxytocin and vasopressin, help to regulate emotional states including approach-avoidance reactions and the tendency of mammals to immobilize, permitting sexual or maternal behavior. Oxytocin and vasopressin are synthesized in and are particularly abundant in the brain structure known as the hypothalamus, but may reach distant receptors including those in the cortex and lower brain stem areas responsible for autonomic functions, thus helping to integrate behavioral and emotional responses.

Oxytocin and vasopressin have the capacity to move through the brain by diffusion, rather than acting only across a synapse or requiring transport by the circulatory system; for this reason these neuropeptides have pervasive effects on the central nervous system. Oxytocin is unique in having only one known receptor and in using the same receptor for many functions, thus allowing coordinated effects on behavior and physiology, although oxytocin also can bind to vasopressin



receptors (and vice versa). Dynamic interactions between oxytocin and vasopressin may be of particular importance to the approach and avoidance components of sociality and the subsequent formation of selective social bonds. For these reasons, it is possible that oxytocin, and perhaps also vasopressin, may have a role in the behavioral responses necessary for positive social behaviors.

The importance of social interactions can be understood in part by examining the consequences of placing animals in social isolation. In this context, oxytocin can be elevated, especially in females, possibly as a protective mechanism against possibly negative consequences of isolation. Oxytocin, often in conjunction with vasopressin and dopamine, influences various social behaviors, including the formation of social bonds, suggesting one mechanism through which social interactions have powerful effects on reward systems.

Oxytocin and vasopressin receptors are found in many brainstem structures including the extended amygdala, and also in the neocortex and hippocampus. The amygdala and its connections serve a role in integration of reactions to various kinds of sensory stimuli, including approach and avoidance. In human males, intranasal administration of oxytocin inhibited the activity of the amygdala and altered down-stream connections to brainstem structures involved in the regulation of the autonomic nervous system. Vasopressin, acting centrally (in areas including the bed nucleus of the stria terminalis, BNST, amygdala and lateral septum), may elevate vigilance and defensiveness, possibly serving in some cases as an antagonist to the effects of oxytocin. Thus, oxytocin has the capacity to reduce fear and calm the sympathetic responses to stressful stimuli.

It is reported that females are more social than males. Explanations for sex differences typically focus on steroid hormones. However, neuropeptides also may be involved. Oxytocin is estrogen-dependent, but has functions in both males and females. However, the hypothalamic synthesis of vasopressin is androgen-dependent and this molecular may be of particular importance to behavior in males. Working together these molecules may allow sexually-dimorphic responses to emotionally contradictory tasks such as forming social bonds or showing empathy, while also permitting rapid behavioral and autonomic reactions, including defensive behaviors or aggression, in the face of other social cues.

The release of oxytocin may encourage social interactions including those associated with detecting and responding to the emotions or experiences of others. Emotional and visceral states influence how we feel about and react to others, and thus our capacity for positive social interactions. Awareness of factors that regulate emotional responses and feeling lead us to a deeper understanding of the evolved neurobiology of positive social behaviors. Selective social behaviors can facilitate survival and reproduction, promoting safety and a sense of emotional security. Sociality is essential to human existence and it is likely that the neural substrates and hormonal conditions for positive social behaviors are shared with those for other forms of sociality including the willingness to approach or trust others or show sensitivity to the emotional cues from others. This strategy for understanding sociality also has been extended to the level of genetic analysis.

As just one example, the genetic substrates responsible for the production of oxytocin and vasopressin receptors have been linked to disorders such as autism. Individual or sex differences in the genetics of this system might be associated with individual differences in social behavior.

SEE ALSO: ► Appetitive motivational systems ► Aversive motivational systems ► Cortisol ► Dopamine ► Social support

# P

## Paragons

Silvia Osswald, Dieter Frey and Tobias Greitemeyer

*Ludwig-Maximilians-University Munich*

A *paragon* is a person of outstanding merit who serves as a model of some quality. Throughout their lives, human beings allow themselves to be guided by the influence of paragons. Especially during childhood and adolescence, paragons play an important role in personality development. Paragons are widely used to change attitudes and behaviors as people not only learn by classical or operant conditioning processes, but also by models. For instance, in antidrug campaigns, famous athletes express that they are against drugs. People like Martin Luther King, Mahatma Gandhi, or Mother Theresa set extremely high standards and it is questionable if such paragons do really play a role in daily life. Thus, when children and adults are directly asked what paragons they have, it is not well-known personalities that are primarily named, but rather friends and most often, one's own parents. For instance, White and O'Brien asked children and adolescents what heroes they have. The 8- to 16-year-olds most often named their parents – ahead of athletes, entertainers, or political leaders. This underscores the importance parents have as models. With increasing age, however, people seem to have fewer paragons – or they are less likely to admit to having some. The reason might be found in a misunderstood individualization (misunderstood because there is no contradiction between being unique and having a paragon) and a desire for matchlessness. On the contrary, Simonton has shown that paragons played an important role in the lives of famous artists. When asking people about their exemplars, it is clear that the answers will differ depending on the area in question: Moral exemplars are different from paragons of intelligence; Einstein is more likely to be a paragon for science-engineering students, whereas Shakespeare would

be among arts-education students. Paragons are also gender-dependent: Female students have more female paragons, whereas male students have mostly male. The paragon *par excellence* does not exist – the choice of a model is always a subjective process. According to Paulhus and Landolt, those who are chosen are familiar, likeable, occupationally and attitudinally similar and often members of the same sex as the individual making the choice.

Aside from the question of who is selected, it is also important to know in what ways exemplars can exert an influence on people. To find answers to such questions, the social cognitive theory of Albert Bandura could be employed as a theoretical framework with special emphasis on the parts of this theory that deal with observational learning. Observational learning means that “observers can acquire cognitive skills and new patterns of behavior by observing the performance of others (i.e. models)” (Bandura, 1986, p. 49). To display their influence, models should be attractive (possess prestige, power or competence) but also similar to the observer. The literature distinguishes between mastery (who already perform perfectly) and coping models (who perform better step by step). In some cases coping models may be preferred to mastery models as the former are more similar to the observer: Models (and paragons) can only affect persons when they are seen as reachable. If a paragon is out of reach (too demanding, too good), those attempting to model him or her will become depressed and frustrated. A special type of observational learning that is significant in this respect is abstract modeling, whereby judgmental skills and general rules are acquired through the observation of a real or symbolic model (e.g., a person described in a text). On a descriptive and prescriptive level, abstract moral rules and ethical norms can be learned from paragons. They can therefore be characterized as direct, informative and motivational models. Paragons, however, also display a more subtle impact: Activated exemplars unconsciously influence cognitive processes or behavior. Baldwin and colleagues demonstrated that priming practicing Catholics subliminally (they were not aware of what they had seen) with pictures of the Pope affected their self-ratings. For nonpracticing Catholics, however, the Pope was not a paragon and therefore had no influence.

More research should be dedicated to this topic, like studies that examine how paragons change through the course of life or whether people act *better* (i.e., more morally) when reminded of their paragons. Furthermore, future research should address how every one of us could become a paragon, a person that acts authentically to make the most (positive) out of one’s own life.

SEE ALSO: ► Self-efficacy ► Social cognitive theory

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## Peace

Ilana Shapiro, Rezarta Bilali, and Johanna Vollhardt

*University of Massachusetts*

Whether it is defined negatively as the absence of hostilities, violence, or war, or more positively as a state of social harmony, tranquility, and equilibrium, the concept of *peace* is undoubtedly complex. Most seem to agree that peace is a human virtue and a noble goal, yet there is no consensus on a definition to help guide in operationalizing the concept or developing measurement procedures and indicators. As a result, both within the field of psychology and across disciplines, researchers apply very diverse theoretical frameworks to its study and often examine different levels of analysis.

At an individual or intrapersonal level, psychologists focus on peace as an internal state of untroubled calm, serenity, and contentment. Both psychological and medical research demonstrates an important relationship between inner peace and physical health. Research in affective neuroscience has examined the effects of meditative practice designed to transcend internal agitation, chatter, and craving and findings suggest a striking difference between trained and untrained individuals' brain activity and capacity to maintain states of inner peace, even in the face of difficult situations and disputatious people. In addition, cognitive-behavioral therapies often include methods for cultivating inner peace as a stress reduction and cognitive restructuring tool useful in the treatment of anger and anxiety disorders, addiction, obsessive compulsive disorders and a variety of other problems.

Perhaps the largest areas of psychological research on peace, however, focus on relations between individuals, groups, and nations. The subdisciplines of social, political, and peace psychology cover vast territory in understanding processes for preventing violence, reducing prejudice and discrimination, resolving conflict, and promoting cooperation. Research focuses on issues such as nonviolence, intergroup contact, interdependence, social justice and morality, prosocial attitudes and behaviors, collaborative problem-solving, integrative negotiation, forgiveness, reconciliation, and posttraumatic growth.

A fairly recent area of research in the field of psychology focuses on more macrolevel issues of peaceful cultures, structures, and systems. Examining how social, economic, political, and military institutions promote or inhibit the development of peaceful attitudes, behaviors, and relationships highlights the psychological impact of situations or contexts on people. This work is concerned with promoting nonviolent social change as well as societal conditions and practices that foster peace.

There is disagreement about how connected these levels of analysis are to each other. Some argue that they are integral: Inner peace is required to be at peace with others and build peaceful societies. Yet others suggest that people can

experience inner peace even amidst the chaos and violence of war. Disagreement also exists about whether peace is an end state – a goal toward which one works – or a dynamic process – a way in which one works.

While issues such as aggression, violence, and conflict have received widespread attention in the field of psychology, the positive construct of peace has been relatively neglected. The development in recent years of the subdiscipline *peace psychology* has only begun to redress this concern and pull together disparate threads of research and theory. Positive psychology, with its focus on optimal functioning, human virtues, and what is right with people, has an important role to play in contributing to this growing area of study.

## An Evolving Psychology of Peace

A number of prominent scholars in the history of psychology have contributed to the study of peace. William James, for example, wrote extensively on militarism and psychological alternatives to war. William McDougall devoted himself to the analyses of peace strategies during World War I, and both Gordon Allport and Otto Klineberg were involved with United Nations' efforts to study international tensions that lead to war. The Society for Psychological Study of Social Issues (Division 9 of the American Psychological Association [APA]) was formed after an appeal to psychologists in 1966 to address issues related to peace and conflict. In 1990, the Society for the Psychological Study of Peace, Conflict, and Violence (Division 48 of the APA) was organized specifically to encourage psychological research and education on this topic. Only a few years later, *Peace and Conflict: The Journal of Peace Psychology* was established as a forum for publishing empirical, theoretical, clinical, and historical work at the intersection of psychology and peace.

Much research in social psychology following World War II focused on psychological processes believed to underlie war such as prejudice, authoritarianism, aggression, obedience, conformity, and attributional biases. Beyond the study of violence, intolerance, and enmity, psychologists also began to explore positive factors that promote and maintain peaceful relations. For example, Mary Parker Follett's innovative work on conflict resolution in organizational settings emphasized the importance of reciprocal relationships and power sharing in fostering peaceful and productive environments. Work on the contact hypothesis by Gordon Allport, and experiments by Muzafer Sherif on intergroup conflict and its resolution, examined conditions that promote cooperative intergroup relations.

During the Cold War, psychological research focused on important related issues such as enemy images (e.g., Ralph White), tension reduction strategies (e.g., Charles Osgood), as well as cooperative interdependence and trust (e.g., Morton Deutsch). In more recent years, the psychological study of peace has shifted to include a greater focus on cultural contexts, differentiated meanings of peace as a construct, and a more systemic perspective on the nature of peace.

## The Psychology of Positive Peace

Current work in the field of psychology related to peace spans a broad array of research areas, theoretical orientations, and practical applications. A useful framework for summarizing work that specifically supports the positive dimensions of peace involves examining issues relevant before (prevention), during (intervention), and after (reconciliation) conflict.

Before, or in the absence of conflict, perspective-taking increases the ability to understand others and make appropriate attributions in potentially contentious situations. This reduces the likelihood of anger, blame, and the escalation of conflict, and conversely, increases positive responses such as forgiveness and helping behavior. Empathy with others enhances altruism, an unselfish concern for others that motivates prosocial behavior, and can help inoculate against participation in a destructive conflict spiral. Prosocial behavior is essential for peace because it is the basis of cooperation, interdependence, and sharing of resources with other individuals and groups. In practice, training and educational programs for youth and educators, community leaders, political leaders, journalists, policy makers, etc. have been one of psychologists' main tools for primary prevention.

During social conflicts, morality – particularly the inclusion of outgroup members in the realm of those to which moral values and positive norms are applied – plays a crucial role in cultivating peace. Likewise, the acknowledgement of shared humanity with members of other groups is important in maintaining peaceful relations in society and the global community. Positive attitudes and relations between members of different social groups are enhanced through cooperative, intergroup contact under optimal conditions. Generally, situations with friendship potential reinforce the development of positive relations between individual members of different social groups, and positive attitudes resulting from outgroup friendships can generalize to the entire group. Many nonviolent interventions focus on creating positive contact situations for parties in the conflict to dialogue with each other, develop joint analyses of the conflict, improve communication and cooperative problem-solving skills, and develop strategies for building peace.

Positive individual characteristics and behaviors can also reduce harm and contribute to the reestablishment of peace once violence has started. Resilience supports normal and prosocial functioning even under adverse conditions such as war. Active bystandership, or responding to the suffering of others with the moral courage to oppose violence or act nonviolently, plays an important role in limiting and counteracting harmful societal movements. Such characteristics have been prevalent among individuals who rescued outgroup members in times of ethnic persecution, such as Christians hiding Jews during the Holocaust.

In the wake of violent conflict, posttraumatic growth among individuals who have experienced mass violence can include enhanced empathy, compassion, and altruism, and result in a strong commitment to positive social change. It can also

manifest as a positive survivor mission to prevent future suffering among individuals and nations.

Forgiveness and reconciliation are positive constructs that foster and sustain peace after conflict. On an interpersonal level, this often involves dialogue processes where both sides have the opportunity to tell their stories about the violent event and receive some form of recognition of grievances, acknowledgement of pain and injustices, and acceptance of responsibility and contrition from the other. On the societal level, establishing truth and a shared history are crucial for both justice and reconciliation. This involves discussing the collective memories of different groups, as well as organizing public rituals that promote collective healing and social transformation. The complex and difficult processes of postconflict peace-building are often sought through truth and reconciliation committees.

## **Methodological Challenges in Studying Peace Psychology**

The complexity of peace as a construct has had consequences for its scientific study. For example, different conceptualizations and definitions of peace have created disconnected and disputed lines of study. In addition, while considerable research exists on elements directly relevant to peace such as empathy, altruism, aggression, and prejudice, difficulties in defining positive peace have made research on the construct itself rare.

Characterized by a focus on individuals and microlevel analysis, recent research funding and publishing trends in psychology have constrained the study of peace at intergroup and societal levels. Research on a multifaceted concept like peace, increasingly needs to draw from triangulated methodologies and address a variety of levels of analysis. Advances in statistical tools such as structural equation modeling and hierarchical linear modeling can support such studies by considering the interplay of multiple variables and levels of group membership.

Within social psychology, the trend of laboratory experiments and survey studies involving college students has been useful in understanding basic psychological processes underlying peace and violence. However, as an applied area of study, research on peace should be supplemented with rigorous studies conducted in real-world settings with representative populations. This is particularly important because both conflict and peace are embedded in specific contexts and involve variations across cultures and situations.

Field research on this topic, however, is wrought with a variety of practical and ethical challenges. Working in conflict zones raises concerns about the physical safety of the researchers and the participants. In addition, conducting research with representative populations can be difficult because of limited access to such groups and their small numbers. Research instruments are often not appropriate or validated across cultures. Finally, addressing sensitive topics such as participants' experiences perpetrating and/or surviving violence carry significant ethical constraints.



## Future Directions in Developing a Psychology of Peace

Advancing a psychology of peace requires strengthening links between theory, research, and practice. Currently, many practitioners do not articulate the theories that inform their work, nor are they necessarily familiar with research that could impact their methods. At the same time, scholars rarely have grounding in practical experience and a disjunction often exists between theoretical issues being studied at universities and the practical needs of psychologists working in the field. In order for this area of study to mature and contribute more effective models and methods for fostering peace, future work must better integrate the work of scholars and practitioners.

In addition, the vast majority of research and practice in the realm of peace has been problem-focused and reactive – exploring ways to reduce aggression, violence, and war after it has already begun. Both psychologists and policy makers seem to agree that a stronger emphasis on prevention is needed. This involves identifying, understanding, and reinforcing positive characteristics and conditions that promote peace and creating environments in which violence is less likely to emerge in the first place. In this way, a positive psychology approach to studying these issues is essential for developing sustainable peace.

SEE ALSO: ► Empathy ► Justice ► Posttraumatic Growth  
► Prosocial Behavior ► Resilience

## Penn Resiliency Program

Jane E. Gillham<sup>ab</sup> and Karen J. Reivich<sup>b</sup>

<sup>a</sup>*Swarthmore College*; <sup>b</sup>*University of Pennsylvania*

The Penn Resiliency Program (PRP) is a group intervention designed to promote resilience in children and adolescents. PRP teaches a variety of cognitive and behavioral skills that are relevant to the wide range of challenges and stressors that are common during the late elementary and middle school years. PRP uses a group format and a structured curriculum, and it can be implemented in schools, after-school programs, clinics and other community settings.

PRP originated as a depression-prevention program. Many of the PRP skills come from cognitive-behavioral therapy, which is one of the most effective therapies for depression. PRP aims to prevent depression by teaching these cognitive and behavioral skills before students encounter the common interpersonal and academic challenges associated with the transition from childhood to adolescence. Rates of depression begin to climb in early adolescence, making this an important period for prevention efforts. In fact, by high school, depression is one of the most common public health problems affecting approximately 5–10% of

adolescents each year. Even more adolescents suffer from high but subclinical levels of symptoms, and these symptoms cause great distress and interfere with functioning.

In PRP, students learn about Albert Ellis's ABC model which states that beliefs and interpretations of events have powerful effects on our emotions and behaviors. Students learn to identify thinking styles that can interfere with problem-solving and exacerbate sadness and anxiety. They learn to identify and challenge inaccurate beliefs by examining the evidence for the belief and by considering alternative ways of understanding the situation. Research suggests the PRP increases optimism; however, it's important to note that the focus in PRP is on increasing optimistic thinking within the bounds of what is accurate. In addition to these cognitive skills, PRP teaches skills for solving problems, coping with uncontrollable stressors and being comfortable with a full range of emotions. Students also learn assertiveness, negotiation, and relaxation techniques as well as skills for overcoming procrastination. PRP includes approximately 18–24 hours of content (usually delivered in 12 sessions lasting from 90 to 120 minutes). PRP is typically delivered to small groups (approximately 8–14 students) by teachers, counselors, and clinicians who have received training in the intervention.

PRP has been evaluated in 13 controlled studies, making it one of the most extensively evaluated depression-prevention programs. These studies have included a total of approximately 2,000 children from a variety of socioeconomic and cultural backgrounds. In most studies, PRP has reduced or prevented symptoms of depression. In some studies PRP's effects have been large. For example, the first study of PRP found the intervention halved the rates of moderate to severe symptoms two years after the program ended. A few studies have not found positive effects on depressive symptoms. PRP appears to be less effective when group leaders receive minimal training or do not cover the intervention content adequately.

Current work on PRP focuses on expanding and strengthening the intervention, and achieving effective dissemination. Studies are evaluating booster sessions for students and a parallel intervention for parents that teaches them to use the PRP skills in their own lives, so that they can model resilience for their children. Research on the effectiveness of the parent program is underway. Results from a pilot study indicated that combining PRP with parent training may more powerfully prevent symptoms of depression and anxiety.

Although initially developed to prevent depression, PRP is currently conceptualized as a program that teaches valuable life skills. These skills are relevant to a variety of academic, social, and family situations, and are helpful to most children. This view of PRP is supported by studies that evaluate effects on outcomes. For example, several studies have documented beneficial effects on anxiety, behavioral problems, cognitive styles, and hopelessness. Evaluations of PRP's effects on positive emotions and achievement are underway.

SEE ALSO: ► Empirically-supported interventions ► Resilience

## Disclosure

The Penn Resiliency Program for Children and Adolescents is owned by the University of Pennsylvania. The University of Pennsylvania has licensed this program to Adaptiv Learning Systems. Dr Reivich and the University of Pennsylvania own stock in Adaptiv and could profit from the sale of this program. Dr Gillham does not have a financial interest in Adaptiv.

## Perseverance

Cynthia L. S. Pury  
*Clemson University*

## Definition

*Perseverance* is the intentional continuation or reapplication of effort toward a goal despite a temptation to quit.

## Intellectual and Social Context

Perseverance (also called *persistence* or *industriousness*) allows us to continue to work towards a goal when, at some level, we would prefer to be doing something else. Nearly all of the advances that make modern civilization possible require extended or repeated effort in the face of failure, fatigue, or boredom. Remove modern civilization and its precursors and perseverance is needed to keep searching for edible plant matter in winter or to stalk yet another antelope after the first two have fled.

Living in modern society likewise requires perseverance, as anyone who has earned a degree, taught a child to tie her shoes, or even tracked down the right person in customer service can attest. Modern sayings attest to the fact that “Quitters never win, and winners never quit,” and “If at first you don’t succeed, try, try again.”

## Major Dimensions of the Topic

### Intentional and Goal-Directed

Intentionality in pursuit of a goal may differentiate perseverance from *perseveration*, unintentional repetition of movement or vocalization, and from automatic habits.

The goal may or may not be socially desirable, and may or may not be attainable. Stalkers, terrorists, and embezzlers may show perseverance, as may a blind person who wants to obtain a commercial pilot’s license.

## Continuation or Reapplication of Effort

Perseverance has been measured by researchers as both time-on-task, representing continuation of effort; and as number of attempts, representing reapplication of effort. Some tasks, such as studying for a test, may be best represented by time-on-task; other tasks, such as perfecting a dive, may be best represented by number of attempts.

## Temptation to Quit

There is no perseverance needed to continue actions that are enjoyable, relaxing, or producing flow. Temptation to quit is required. This temptation may be due to internal factors, such as boredom or low self-esteem; due to situational factors, such as task difficulty or other people; or a combination of both. Moreover, it must be possible to quit: Coping well with an unpleasant but inescapable experience such as grief or pain may elicit endurance but not perseverance.

## Changes Over Time in Perseverance Research

The history of perseverance research mirrors the history of psychology. The early 1900s saw an interest in measurement of individual differences in a laboratory setting. Persistence was measured by various physical tests, such as standing on the balls of one's feet or holding a small dumbbell at arms length for as long as possible. By the 1930s, many of these tasks were collected into batteries designed to measure perseverance. Sample battery items include solving anagrams, code deciphering, inhibition of free association, inhibition of patellar reflex, continuous addition, arm extension, resistance to shock, and maintained grip. Persistence on such batteries has been associated with grades in school, emotional stability, and resistance to suggestion. Scores increase with age to adolescence, and college students score higher than high school students.

Trait approaches to persistence continued to flourish, and followed the same trajectory as trait psychology in general. Introduction of factor analytic techniques indicated both general and task-specific components of persistence. Trait approaches were expanded to include life-data performance measures (e.g., completion of a course of study) and ratings made by self and others. These measures correlate with emotional stability and extraversion.

A parallel trend in psychology was the rise of behaviorism. Learning models of perseverance came to dominate, and the most dominant of these was based on the partial reinforcement extinction effect (PREE). PREE has most commonly been observed in operant conditioning paradigms. During the learning phase of the experiment, a given response is rewarded on either a continuous reinforcement schedule (after every correct response) or on a partial reinforcement schedule (after only some correct responses). During the extinction phase, the reinforcement

is withdrawn. The extent to which the organism continues to respond without reinforcement is the measure of perseverance. PREE occurs when organisms trained on a partial reinforcement schedule continue responding to a greater extent than organisms trained on a continuous reinforcement schedule. PREE is very robust: observed in both humans and nonhumans for a wide variety of behaviors, ranging from lever pressing and maze running to schoolwork and housekeeping tasks. It is worth noting that in this paradigm, continued goal-directed behavior during extinction is objectively maladaptive, as the rewards have ceased.

Cognitive motivational approaches, exemplified by Feather's extension of Lewin's achievement motivation, examined perseverance as a measure of how quickly goals change when individuals encounter obstacles. Perseverance on laboratory tasks is predicted by the interaction of expectation of success and achievement motivation. Individuals high in achievement motivation persist longer on a task presented as easy; individuals high in failure avoidance motivation persist longer on a task presented as difficult.

Attributional or explanatory style likewise presents a cognitively-mediated model of low perseverance and other motivational deficits present in depression. Attributional style refers to an individual's habitual explanations for negative events. Those with depressogenic attributional styles explain failures as due to internal, stable, and global causes. Thus, following a failure, they conclude that it is due to something about them that will not change and will affect multiple areas of their life. Learned helplessness begins and motivational deficits, including a lack of perseverance, begin.

## **Current Emphases in Perseverance Research and Theory**

### **Individual Differences**

Individual differences in perseverance, like other traits, have been increasingly explained in terms of differences in cognitive processes. Most directly relevant to perseverance theory is Dweck's social-cognitive approach. Dweck and her colleagues propose that, when faced with a task, an individual can hold performance goals or learning goals. Performance goals motivate behavior as a means to reward. Learning goals motivate behavior as a means to increase skill. Both are related to the individual's theory of intelligence or performance in the domain of interest: An individual can see his or her performance as due to immutable abilities or as learnable. If the person believes the task taps fixed abilities, the individual will hold performance goals. If the person believes the task taps into skills that improve with learning, the individual will hold learning goals. In general, research indicates that learning goals lead to greater perseverance in the face of failure than performance goals. However, if the individual is confident in his or her abilities, performance goals will lead to greater perseverance than learning goals.

Self-efficacy involves a person's belief in his or her own ability to bring about a desired outcome. Individuals higher in self-efficacy have shown increased perseverance on a wide variety of tasks.

Self-esteem, or self-appraisal, also influences perseverance. In situations in which persistence is likely to lead to success eventually, individuals with high self-esteem show greater perseverance than those with low self-esteem. However, in situations in which perseverance is unlikely to lead to success, individuals low in self-esteem persevere longer than individuals high in self-esteem.

The values in action system (VIA) considers persistence as one of four character strengths that, along with bravery, integrity, and vitality, comprise the larger virtue of courage. Recent research suggests that persistence is the most common strength in courageous actions.

## Learning Models

Eisenberger's learned industrious theory explains and expands on PREE. The experience of exerting effort is both aversive and an experience in itself, subject to the same conditioning effects as any other experience. Partial reinforcement involves the pairing of reward with higher levels of effort during learning. The experience of expending greater effort under partial reinforcement becomes a secondary reinforcer itself, leading to enhanced perseverance during extinction. Beyond partial reinforcement, other ways of rewarding high effort, including rewarding higher levels of performance or explicit verbal acknowledgment of high effort, also yield increased persistence.

Rewarding high effort creates generalized perseverance in a variety of ways. Individuals with a history of learned industriousness training will later persist in the face of other obnoxious stimuli, not just absence of reward. Generalized cognitions during training (e.g., "I'm good at school") lead to greater generalized persistence than more specific cognitions (e.g., "I'm good at remembering pictures"). Learned industriousness can lead to greater self-control and greater integrity in other situations, and can immunize participants against the effects of learned helplessness. Finally, highly persistent individuals report a greater history of strong reinforcement for high effort.

## Methodological Issues and Future Directions

Future time perspective is an individual difference in how one's present effort fits with future goals. Greater perseverance is seen when the future goals are internally motivated and the relationship between action and future goal is made explicit. Future time perspective may provide a framework for understanding perseverance in larger goals and their component subgoals. For example, "graduation from college," "completion of foreign language sequence," "pass French 102," and "study for tomorrow's French test" represent different levels of nested goals, each of which may require perseverance.

Self-efficacy theory has been expanded to include other forms of human agency, including moral agency and agency at a societal level. The extent to which moral and societal agency also increase perseverance is unknown.

While a general attitude of perseverance may be associated with greater life satisfaction and greater success, continued persistence in the face of clear evidence that reward is not forthcoming may be maladaptive. This is objectively the case in PREE paradigms: Rewards have ceased during extinction. Self-esteem has been shown to increase the chance of appropriate perseverance; other strengths and values, such as wisdom or practical intelligence, may come into play as well.

The desirability of the goal may also be an issue. While history of drug and alcohol abuse shows a negative relationship with persistence, it is not difficult to imagine that persistence may be required to obtain substances illegally. Likewise, perseverance may be required to seek revenge, carry out a terrorist plot, or engage in other negative behaviors. Perseverance has been shown to be related to success in societally-valued activities such as educational attainment and work; the extent to which it is related to undesirable goal attainment remains for future research.

SEE ALSO: ► Character strengths (VIA) ► Courage ► Hope  
► Self-efficacy ► Self-regulation

## Personal Growth Initiative

Christine Robitschek and Cynthia Spering

*Texas Tech University*

*Personal growth initiative*, a construct operationalized by Christine Robitschek, is intentional engagement in the process of trying to change oneself. It grew out of her work with students in a wilderness program, Outward Bound, which focuses on personal growth. Personal growth initiative includes cognitive and behavioral elements. The cognitive elements, such as believing that change within the self is possible, valuing this type of change, and knowing how to change the self function as precursors for the behavioral elements. The behavioral elements involve actually engaging in the behaviors that lead to changes in the self, when confronted with a need to change or when the person simply desires to change.

Personal growth initiative exists on a continuum from low to high levels, with the individual's level of personal growth initiative determining, in part, how the person will respond in a situation that either requires the person to change or presents an opportunity for change and growth. For example, if a person with a high level of personal growth initiative wants to become more assertive, this person most likely will believe that it is possible to become more assertive (that the change is possible), will value this change, and will either know what steps to take to become more assertive or will take the initiative to find out how to become more assertive. Then this person most likely will follow through with these steps and actually succeed

in becoming more assertive (i.e., will enact the behaviors). In contrast, a person with a low level of personal growth initiative may share the desire to become more assertive but may not believe that this change is possible, may not value the change, may not know what steps to take to make this change or how to get assistance to learn these steps, or may not follow-through with these steps even if the knowledge is obtained.

## Personal Growth Initiative in Contrast with Other Constructs

Given the plethora of positive psychology constructs that center on human agency, it is important to clarify how personal growth initiative is differentiated from other dimensions of human agency.

### Personal Growth

Perhaps the greatest potential source of confusion is the difference between the constructs of personal growth and personal growth *initiative*. Carol Ryff defined personal growth as awareness that one is changing and developing as a person across the lifespan. The important distinction is that personal growth initiative involves *intentional* cognitions and behaviors; Ryff's personal growth only requires *awareness* that the growth is occurring.

### Self-Actualization

Both personal growth initiative and self-actualization address intentional actions directed at self-improvement. However, self-actualization is theorized to be a human *need*, an imperative within each person that will inherently motivate humans if all other needs are met. In contrast, personal growth initiative can be present in a person regardless of the extent to which other needs have been met. In some situations, a person may need to grow in a personal way to get basic needs met; for example, a person who is in an abusive relationship may need to increase his or her self-esteem to get basic safety needs met. To seek out counseling explicitly to gain this self-esteem is to enact one's personal growth initiative.

### Self-Efficacy

Albert Bandura defined *self-efficacy* as the belief that one can perform a specific behavior necessary to obtain a specific outcome. A person can have self-efficacy for intentional personal growth in a specific domain. But the cognitive components of personal growth initiative are both more basic than self-efficacy (e.g., believing that change within the self is possible) and go beyond self-efficacy for intentional change (e.g., valuing intentional change and possessing the requisite knowledge to change the self).



## Achievement

Personal growth initiative can be confused with the outcomes of growth, in other words, *achievement*. Sometimes personal growth is needed for achievement to occur. For example, a person with a fear of heights may need to actively work on reducing this fear (thereby growing as a person) to become an accomplished rock climber. But intentional personal growth is not inherent in the resulting achievement. This same person may be very disciplined about weight lifting and have no need to change anything *within the self* (i.e., no personal growth is required) to build stronger muscles to become an accomplished rock climber.

## Personal Growth Initiative in Relation to Human Functioning

Personal growth initiative has been related to a broad range of dimensions of human functioning, including both adaptive and maladaptive functioning. Research has shown that people with high levels of personal growth initiative tend to have higher levels of psychological, social, and emotional well-being than people with low levels of personal growth initiative. Similarly, people with high levels of personal growth initiative may be better prepared to cope with common developmental tasks, such as career decision making, which requires developing one's vocational identity. People with high levels of personal growth initiative also tend to have high levels of adaptive coping skills, specifically a reflective coping style. They are better able to cope with transitions in life because they know how to make changes in themselves and their lives; they know how to grow. Conversely, people with low personal growth initiative tend to have somewhat high levels of depressive and anxious symptoms, although these symptoms are not always at clinically significant levels.

## Measuring Personal Growth Initiative

Personal growth initiative is measured by the Personal Growth Initiative Scale (PGIS). The PGIS is a 9-item scale, with each item rated on a 6-point Likert scale ranging from 0 (*definitely disagree*) to 5 (*definitely agree*). A single scale score is calculated by summing the responses to all items; total scores can range from 0 to 45. Higher scores indicate higher levels of personal growth initiative. Research has provided evidence of strong internal consistency, test-retest reliability, and convergent, discriminant, and cultural validity (for Mexican Americans and European Americans) for the PGIS. In the research to date, women and men generally have had similar scores on the PGIS and scores have been similar across ethnic groups in the United States.

One limitation of this research is that it has been conducted almost exclusively with non-Hispanic white and Latino college student samples. Further assessing

the cultural validity of personal growth initiative and its relevance across lifespan and life situations will be important contributions. A second limitation is the unidimensional construction of the PGIS. By definition, personal growth initiative is multidimensional, including both cognitions and behaviors, with multiple dimensions within the cognitions. Yet the current version of the PGIS blends cognitions and behaviors into a unidimensional measure. Refining the measurement of personal growth initiative so that these multiple dimensions can be independently assessed would be a welcome addition to the field of positive psychology. This new measure would allow psychologists and other mental health practitioners to determine where clients are limited in their personal growth initiative so that interventions can be targeted to these specific areas.

## Personal Growth Initiative in Psychotherapy

Many theories of psychotherapy state that one of the purposes of counseling is to teach the process of personal growth so that clients will be able to transfer this process to situations they encounter outside the therapy hour and after the therapy experience. Although this process may be called something quite different from personal growth, for example, disputing irrational thoughts, as in cognitive therapy, the shared notion is to teach the self-change process to clients within therapy. Mental health practitioners can assess a client's level of personal growth initiative at the beginning of therapy to determine if clients are entering therapy ready to make changes in themselves or needing to learn to value intentional personal growth. Research has shown that clients with higher levels of personal growth initiative are likely to be more ready to take action in making changes in themselves and their lives, as opposed to being in a contemplative stage. In addition, personal growth initiative theory indicates that engaging in the process of growth or change will increase clients' overall levels of personal growth initiative. This, in turn, may make these clients more likely to create additional positive changes in themselves in the future. It is noteworthy, however, that although personal growth initiative theory has made this claim, there is limited research, to date, to either support or challenge it. Future research can begin to investigate these propositions.

SEE ALSO: ► Change (stages of) ► Growth goals

## Personal Responsibility

P. Alex Linley<sup>a</sup> and John Maltby<sup>b</sup>

<sup>a</sup>Centre for Applied Positive Psychology, UK; <sup>b</sup>University of Leicester, UK

*Personal responsibility* is concerned with people taking individual accountability for their decisions and actions, together with the outcomes they create and their

impacts on others. It is about feeling that one is the author of one's own life, accountable for the life that is created and the impacts caused through one's decisions and actions, both on oneself and on others. Within philosophy, the concept has been referred to as *moral responsibility*, although with a narrower focus on causal accountability for actions either undertaken or not undertaken.

Personal responsibility is differentiated from *civic* or *social responsibility*, which is concerned with our collective responsibilities to each other as human beings. The constructs are, however, related. Personal responsibility is understood at the level of the individual; civic or social responsibility is understood at the level of the collective. Responsibility is often also defined from the perspective of legal culpability, but the concept of personal responsibility differs from this constrained definition, being focused more widely on a prospective, future-focused sense of the need to take actions that will deliver appropriate outcomes over time, rather than a retrospective, past-focused accountability and culpability for previous actions.

On this basis, personal responsibility can be understood as actively *taking* responsibility, rather than passively *being* responsible. Personal responsibility is about one's willingness to be held accountable for one's life and one's impacts on others. When one chooses the behavior in knowledge of the outcome, one is also holding oneself accountable for that outcome, whether the outcome is achieved or not. The opposite of personal responsibility may be considered *entitlement*, the sense that someone or something else is accountable for one's life, rather than oneself, or more directly, *irresponsibility*, that is, acting without responsibility.

## Personal Responsibility and Empirical Research

Personal responsibility is a core virtue within positive psychology, but it has received remarkably little empirical or theoretical attention, despite being cited as one of the core virtues in the opening article of the positive psychology special issue of the *American Psychologist* in January 2000.

This relative lack of empirical attention to the topic of personal responsibility also extends more widely; there are, however, themes across certain domains. In education, personal responsibility has been regarded as a topic that should be taught and developed in students to render them better members of civilized society. In health, personal responsibility has been advocated as a means of increasing healthy choice behaviors with attendant positive consequences for disease prevention and health promotion. In organizations, personal responsibility has been studied in relation to people acting together to create better working environments, and holding themselves accountable for the effective and appropriate discharge of their professional duties. In forensic settings, personal-responsibility therapy has focused on changing the cognitive errors that are believed to lead to criminal behavior, and developing a sense of remorse and regret as a mainstay for future responsible living.

There are two self-report measures of personal responsibility, the Student Personal Responsibility Scale-10, which assesses students' acceptance of personal

responsibility in their day to day living, and the scale developed by Bierhoff and colleagues to assess personal responsibility in the context of work. Neither scale has been used widely. There are not yet either descriptive or explanatory models of personal responsibility, although the triangle model of responsibility, developed by Barry Schlenker and colleagues, has been influential. This model, however, is concerned with responsibility retrospectively as culpability, rather than with personal responsibility prospectively as life authorship.

## Personal Responsibility and Social Well-Being

Personal responsibility is regarded as a central virtue of a civic society. In *Man's Search for Meaning*, the eminent psychiatrist Viktor Frankl wrote "I recommend that the Statue of Liberty on the East Coast be supplemented by a Statue of Responsibility on the West Coast" (1984, p. 134), and this Statue of Responsibility, showing two interlocking hands, is now under construction through the auspices of the Statue of Responsibility Foundation. Frankl's argument was that too much focus had been given to individual liberty, and not enough to personal responsibility. It is axiomatic, but rights need to be balanced by responsibilities. This is also the essence of the philosopher Immanuel Kant's categorical imperative: the idea that we must act toward others as we would wish them to act toward us, and further, that we must reject any course of action that cannot be universalized in this way. In this way, acting from a sense of personal responsibility is regarded as a requirement of living in a civilized world: When people do so, the quality of life for all citizens is enhanced as a result. This theme of personal responsibility enhancing the lives of all citizens has been identified in public policy in both the United States and the United Kingdom.

In seeking to balance the freedoms of individualism with recognition of the responsibilities that those freedoms bring, Western governments are paying increasing attention to the role of personal responsibility in a well-functioning society. In Britain, for example, the Prime Minister's Strategy Unit in 2004 published a report entitled *Personal Responsibility and Changing Behaviour: The State of Knowledge and Its Implications for Public Policy*. This paper cited three key reasons for the growing interest in personal responsibility. First, improvements in public service require greater public engagement, and personal responsibility is a core factor of that engagement, whether in health through better diet and exercise, or in education through children's willingness to learn and parents' willingness to help them. Second, protecting and enhancing personal responsibility is regarded as a moral and political good in its own right, and UK social policy is largely premised on this fundamental assumption. Enhancing personal responsibility strengthens individual character and moral capacity, as well as enhancing the quality of life of the whole community. Third, across a range of policy areas, including health, education and crime, behavioral interventions underpinned by personal responsibility are more cost effective and deliver better outcomes. For example, a change in diet

which prevents heart problems is better and cheaper than dealing with the consequences of poor diet and subsequent heart surgery. Overall, this strategy paper concluded that through enhancing personal responsibility, more effective public services and a stronger society would result.

In the United States, similar principles were enacted into law with the *Personal Responsibility and Work Opportunity Reconciliation Act* of 1996. This act essentially sought to end the culture of welfare as an entitlement, by requiring that claimants met certain conditions, including being in work or actively looking for work – a shift in personal responsibility that transferred at least a degree of the accountability for their individual welfare to the individual, rather than allowing that welfare to rest entirely with the state. The underlying principle of the act, as suggested by its title, was to enhance personal responsibility as an explicit public policy aim.

## **Personal Responsibility and Irresponsibility in Business**

The question of personal responsibility, and indeed irresponsibility, is a topical one in the business world. For example, with the scandals of irresponsibility at Enron and at Arthur Andersen, there have been calls for a greater focus on responsibility. One response to those calls has been the volume *Responsibility at Work*, edited by Howard Gardner, which draws from the findings of the initial efforts of the GoodWork Project, concerned with understanding work that is excellent, engaging and ethical. In *Responsibility at Work*, William Damon and Kendall Cotton Bronk define three types of ultimate personal responsibility that people may take at work: responsibility for the ethical conduct of the organization and its employees; responsibility for the fulfillment of the organization's professional or business purposes; and responsibility for the wider social good to which the organization can contribute. Gardner concludes the volume with a clarion call for personal responsibility at work:

As aspiring trustees, we see our responsibility clearly: to portray what it means to be responsible, to model responsibility to the best of our ability, and to pass on a sense of responsibility to the future stewards of the workplace and the wider world. (Gardner, 2007, p. 335)

## **Future Directions**

It is clear that personal responsibility can be regarded as a personal, social and civic good in its own right. It is also clear that most people subscribe to this view, rather than advocating irresponsibility or entitlement, which is presumably premised on the implicit understanding that a society where people act with personal responsibility is a society that delivers a better quality of life for all its citizens. Equally clear is that people do not always act in accordance with this sense of

personal responsibility. Future research should therefore be focused on exploring, explicating and advocating the most effective means through which personal responsibility can be practiced as well as understood, developed as well as recognized. To do so, future work should seek to understand the implicit theories that people hold about personal responsibility, recognizing that these implicit theories evolve over time and across cultures, and using them as the basis for further work, empirical and applied, that underpins the development of individual practices, social institutions and public policies that are enhancing of personal responsibility and the broader benefits this virtue enables.

SEE ALSO: ► Character education ► Civic responsibility and virtues  
► Frankl, Viktor ► Moral judgment ► Virtues ► Well-being

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## Personality

Mark D. Holder and Andrea Klassen  
*University of British Columbia, Okanagan*

In the study of psychology, *personality* refers to the internal traits that contribute to people behaving in consistent ways over time and across situations. Our personalities are our unique set of individual differences that govern how we behave and how we react to the environment. Our personalities are relatively enduring components that describe who we are; they are not momentary and fluctuating states. Research has demonstrated that different dimensions of personality are strongly associated with aspects of positive psychology, including happiness and life-satisfaction.

Two personality variables that have been consistently and strongly connected with positive psychology are extroversion (a trait typified by being social, assertive, lively, and sensation seeking) and neuroticism (a trait typified by being anxious, depressed, and emotional, as well as having low self-esteem). For example, people who are highly extroverted tend to be happier, and people who are highly neurotic tend to be less happy. One study reported that extroversion and neuroticism together accounted for 42% of the variance in the happiness of adults and that extroversion and neuroticism also predicted well-being more than a decade later.

In addition to extroversion and neuroticism, additional variables related to personality are associated with happiness in adults. For example, optimistic people

(i.e., those people with a bright, positive outlook and relatively low levels of hopelessness and pessimism) tend to rate highly in aspects of positive psychology, including happiness. Additional variables related to personality that have been associated with positive psychology include assertiveness (those who are more assertive report higher levels of happiness), attributional style (those who attribute life events to their own actions and, therefore, believe they have the capacity to effect change report higher levels of happiness), emotional stability (those who are emotionally unstable report lower levels of happiness), loneliness (those who are lonely report lower levels of happiness), and self-esteem (those with high self-esteem report higher levels of happiness).

Although the majority of research on the relationship between personality and positive psychology has used adults, many of the findings from this research have been extended to the elderly, adolescents, and children. For example, in a group of people aged 51 to 95, happiness was associated with extroversion, neuroticism, and self-esteem. Similarly, self-esteem, optimism, neuroticism, and introversion were found to predict happiness in adolescents. In addition, life satisfaction in children was positively correlated with extroversion and negatively correlated with introversion. Furthermore, one study showed that for four different measures of children's happiness, a variable akin to neuroticism accounted for a significant proportion of the variance. Thus, though personality may continue to develop until past the mid-twenties the early underpinnings of factors that may be related to aspects of neuroticism and extroversion are associated with happiness. It is important to study different age groups to determine whether the relationship between personality and positive psychology changes throughout the lifespan.

Though personality and positive psychology are associated, research has not established a clear causal relationship between personality and positive life outcomes. Individuals' personalities may predispose them to experience higher levels of happiness and life satisfaction. This position is supported by research showing that extraverts report higher levels of happiness, whereas introverts report lower levels of happiness. It is unlikely that aspects of positive psychology cause the development of particular personality traits due to the fact that personality traits appear early in life and appear to be regulated by genetics. However, it is possible that one or more external variables may influence both personality and positive psychology, thus accounting for their association.

The relationship between personality and optimal well-being may be mediated by external factors. For example, social affiliations have been strongly linked to happiness and life satisfaction (i.e., happy people have more friends and participate in more social activities than less happy people). Thus, rather than extroversion causing happiness, the fact that an individual is extroverted increases the likelihood that this individual will seek out social relationships, social situations, and social leisure activities, and these social affiliations in turn may promote happiness. Conversely, a neurotic person would be less likely to seek out social affiliations and this may contribute to why individuals who score highly on neuroticism are also less happy. Similarly, assertiveness has been shown to act as a mediator between happiness and personality. Assertiveness was found to predict happiness, and its

mediating effects largely explained the contributions of extroversion and neuroticism. Furthermore, though personality factors were found to predict happiness, attributional style, which was correlated with extroversion and neuroticism, was important in explaining happiness. In essence, our personalities may predispose us to use certain behavioural strategies, some of which may influence our positive and negative emotions.

Personality may influence the effectiveness of behavioral strategies that people choose to achieve happiness. Rather than a single set of strategies being effective for all people, research suggests that in order to achieve happiness, a person must pursue goals that are consistent with their personalities. For example, people with high levels of extroversion and agreeableness (i.e., people who are cooperative, forgiving, and kind), will be more successful in achieving happiness if they pursue social goals. People with high levels of introversion may not be as successful if they pursue these same goals.

Though aspects of positive psychology are clearly and strongly related to personality variables, they are distinguishable. For example, though high self-esteem has been used as an indication of global happiness, the factors that predict happiness and self-esteem differ. Self-esteem may be required to achieve well-being, happiness, and satisfaction, but self-esteem alone does not guarantee these aspects of positive psychology.

Assessing the relationship between personality and positive psychology is a fertile ground for future research. Researchers still need to explore potential mediators and explain how they influence the relationship between personality and positive psychology. In addition, the relationship between the different dimensions of children's temperament and positive psychology requires additional study. Temperament is thought to be the foundation for adult personality and there is little research exploring its links with positive psychology. Furthermore, children have been a largely ignored population in positive psychology research. Therefore, it is important to explore whether research with children shows similar or different results than the adult literature. For example, it is possible that the relation between personality and positive psychology may be stronger in younger people. Finally, research should continue to explore individual differences in all age groups to discover how they contribute to, influence, and possibly mediate the relationship between personality and positive psychology.

SEE ALSO: ► Allport, Gordon ► Five factor model ► Optimism

## Person-Environment Fit

W. Bruce Walsh

*Ohio State University*

The match between characteristics of the person and characteristics of the environment reflects the concept of *person-environment fit*. Theoretically, person-environment



fit is a fulcrum concept that is assumed to influence a wide variety of psychological phenomena, ranging from satisfaction to performance to personality consistency to subjective well-being. As noted by Walter Mischel, we can't take the person out of personality; but at the same time, we can't ignore the fact that environments and social cultures, like people, have personalities and influence behavior and well-being.

A number of person-environment fit theories have clear implications for positive psychology and well-being. These theories include Holland's theory of personality types and model environments; the theory of work adjustment by Dawis, England, and Lofquist; social cognitive theory by Lent, Brown, and Hackett; the situation selection theory by Diener, Larson, and Emmons; the self-concordance theory by Sheldon and Elliott; the demands control model by Karasek and Theorell; the attraction, selection, attrition model by Schneider, Smith, and Goldstein; the social-ecological model of well-being by Little; the transitional approach by Pervin; and the life domains approach by Moos. Taken together, these theories and their related research, in one way or another, suggest that persons in environments that are congruent with their personalities tend to be psychologically healthier, more satisfied, and more productive than persons in incongruent environments.

Related reviews of the literature have further focused on individual motivation and the pursuit of relevant goals. Overall, the evidence suggests that individuals who pursue personal goals that are self-selected and self-congruent tend to experience enhanced levels of subjective well-being. Research in this area also suggests that subjective well-being is enhanced when we pursue goals that have a long-term orientation rather than goals that satisfy short-term needs. In addition, intrinsic goals which are group enhancing and focus on the contributions we can make to others tend to be more positively related to well-being than more self-serving goals. Overall, goals are important to us; they give our lives meaning and an identity.

With respect to person-environment fit and the research, there are a number of conceptual and methodological issues. For example, studies of personal-environment congruence frequently implement a point-in-time view of congruence or fit. The primary approach has been to describe the person and the environment and explore their independent and interaction effects. In essence, the research generally is conducted at one point in time. However, a number of theoretical frameworks note that people tend to seek out complementary or congruent environments and that environments attract, retain, and influence these individuals. Bandura, for example, suggests that humans act on the environment; they create, uphold, and transform their environment in an interplay between the personal agency, and environmental influences. According to Bandura, people are producers of their life circumstances and not just the products of them. Thus, these assumptions further suggest the need for research designs that run across time. Very few studies have empirically investigated the person-environment hypothesis from a longitudinal perspective.

In addition, major methodological issues continue to revolve around ways of measuring people's personality, interests, and environment, and congruence itself. From all indications people are the strength. The person concept has been operationalized using a variety of traditional inventories of personality, interests, competencies, and values that have proven reliability and validity. The measurement quality of the instruments used is such that we can be reasonably certain that we have obtained a good estimate of the person side of the equation. However, actually measuring the environment or the situation has been far more difficult. There is no question that we need more reliable and valid assessments of the environment. We are still in the early stages of our understanding of the characteristics of the situation or the environment that affect behavior. Different from personality, we have no well-accepted taxonomies that we can use to describe the significant dimensions of environmental variability.

Finally, there are a number of important issues in the person-environment domain that need to be mentioned. One such issue that cross-cuts all social sciences is that concerning cultural relativism vs. universals in human behavior. What is culture general and what is culture specific? There is no question that definitions of the person and the environment are culturally rooted and any assessment of the person and the environment cannot be value free. An additional issue is that of wealth. How might wealth influence the person-environment process and worker satisfaction, well-being, and performance? For example, a poor infrastructure within a nation would tend to restrict opportunities for stable relationships, personal expressiveness, and productivity. Thus, as noted by Ryan and Deci, not only can national poverty interfere with the satisfaction of physical needs (such as food and shelter), but it can also arrest and block access to expressing competencies, pursuing interests, and maintaining relationships which would provide psychological need satisfaction. Also, freedom appears to be an important issue. A book by Sen titled *Development as Freedom* argued that freedom is a more rationale goal for national development than is gross national product. He shows that in cultures where relative freedoms have been augmented, both quality of life and economic growth are improved.

In summary, the assertion that satisfaction, performance, and well-being are related to congruence remains intuitively appealing and paramount in work and person-environment psychology. Researchers have tried to address this assertion, but the work remains incomplete. Given this context, it is the interaction of the environment (cultural, situational, physical, technological and informational) and the person (cognitive, affective, and behavioral) that we need to understand more effectively in order to improve our knowledge of the process by which person-environment congruence becomes reflected in certain outcomes. This includes how personality is related to goal-setting behavior and well-being; how personality affects the choice of situations at work; how job satisfaction and performance are affected by personality and choice of situations; and in general, how personality affects behavior and well-being in certain kinds of situations.

SEE ALSO: ► Subjective well-being ► Vocation

## Peterson, Christopher

Nansook Park

*University of Rhode Island*

Christopher Peterson, PhD, (1950– ) is best known for his work on good and bad adaptation, with a focus on the role played by such individual differences as optimism, personal control, and strengths of character, in a variety of populations with respect to outcomes like health, work performance, achievement, and life satisfaction. He is currently Professor of Psychology at the University of Michigan.

Dr Peterson's main contribution to positive psychology is his role as research director of the Values in Action (VIA) Project, which is arguably the most ambitious empirical undertaking to date within positive psychology. The goals of the project are to provide: a) a coherent classification of human strengths and virtues; and b) reliable and valid strategies for assessing these aspects of excellence.

Dr Peterson has authored or coauthored 10 books, 70 book chapters, and 140 journal articles. His most recent books are *Character Strengths and Virtues* and an introductory text: *A Primer in Positive Psychology*. In 2003, he was named by the Institute for Scientific Information (ISI) as among the world's 100 most widely-cited psychologists over the past 20 years. His work has been featured on numerous newspapers and popular magazines worldwide including *The New York Times*, *Time*, *Newsweek*, *U.S. News and World Report*, *USA Today*, and *Reader's Digest*.

In 1999, Dr Peterson was named an Arthur F. Thurnau Professor at the University of Michigan, in honor of his excellence in undergraduate teaching. On two different occasions, a psychology course that he taught at Michigan was named "best university course" by the Ann Arbor Weekend Magazine. At the University of Michigan, Peterson served as the Director of the APA-approved clinical psychology program from 1996 to 2000 and again in 2002. He has been the Ferne Forman Fischer Lecturer at the University of Kansas, the Clifford Fawl Lecturer at Nebraska Wesleyan University, and the Thomas Hawkins Johnson Visiting Scholar at the United States Military Academy.

Dr Peterson earned his PhD from the University of Colorado in Boulder with emphases in social psychology, personality psychology, and learning and completed post-doctoral respecialization in clinical psychology at the University of Pennsylvania.

Dr Peterson's work spans subdisciplines within psychology and has often entailed the creation of new methods and measures for assessing individual differences, including content analysis strategies for measuring explanatory style and various measures of character strengths. He developed the CAVE technique – an acronym for Content Analysis of Verbatim Explanations – that allows optimism to be assessed from how individuals explain the causes of events. One of the best-known of Dr Peterson's findings, from his pioneering studies in the 1980s, is that optimism longitudinally predicts good health operationalized in a variety of ways, from self-reported symptoms to physician-rated health to longevity. He found that optimists are healthy because they behave in health-promoting ways.

Dr Peterson is a member of the Positive Psychology Steering Committee, a consulting editor of the *Journal of Positive Psychology*, a Templeton Senior Fellow at the Positive Psychology Center of the University of Pennsylvania, and the editor of the Oxford University Press Series in Positive Psychology.

SEE ALSO: ► Character strengths (VIA)

## Physical Health

Heather N. Rasmussen<sup>a</sup> and Sarah D. Pressman<sup>b</sup>

<sup>a</sup>University of Kansas; <sup>b</sup>University of Pittsburgh Medical Center

Physical health can be described as a state of optimal well-being, free of disease or illness. When considering personal physical health, however, some might think about exercising outside on a summer day, whereas others might think about going throughout the day without experiencing physical pain. Accordingly, many researchers in psychology interested in studying health actually measure it in a variety of ways such as assessing illness, disease survival, or quality of life during an illness. In the following section, the definitions and measurement of physical health and illness will be discussed. This is followed by examples of research on positive psychological constructs and physical health/illness and finally, suggestions for future research in the field are identified.

### What is Physical Health?

The term *physical health* is quite broad. Physical health can be framed in terms of *absence* of symptoms or objective indicators of disease or injury, whereas physical illness is the *presence* of subjective and objective indicators of disease or injury. Health also can be thought of as the presence of positive states, such as well-being or pregnancy, rather than simply the absence of illness or injury. Studying health and illness also is a broad endeavor as it could include research with healthy participants as well as patient populations. Studies of healthy participants are wide ranging, from smoking prevention efforts to investigating the health effects of everyday stress. Within the patient populations, patients with diverse types of diseases are represented across studies, from those with a common cold to those with HIV. It should be clear that studying physical health from a psychological perspective is as vast as the science of psychology.

### Measuring Physical Health and Illness

Just as there are many ways to define physical health and illness there exists a variety of measures used to assess physical health and illness. Some examples include

examining mortality and survival, physical symptoms, disease morbidity, pain, and perceived health in both healthy and diseased populations. One approach to categorizing the variety of measures, is to consider whether the health outcome is self-reported by the research subject or achieved objectively via a medical professional or some other unbiased source.

### Objective Health Outcomes

Objective health outcomes represent measures that can be objectively determined via physician assessment, medical records, or biological testing. For example, measures might include biopsies for cancer, clinical assessments, or other technologically achieved medical tests (e.g., brain imaging, x-ray, EKG) and physiological measures (e.g., heart rate, blood pressure, respiration, immune function) intended to help with the diagnosis of disease. The key to objective measures is that these are not self-reported by the patient or research subject but are instead indicated by an unbiased medical professional.

### Subjective Health Outcomes

Subjective health outcomes are primarily measured using self-report measures, such as questionnaires, surveys, or interviews. These are medical indices that are reported by the participant or a close other (e.g., family member). There are a wide variety of subjective health outcomes, including reports of pain and physical symptoms, perceived health, quality of life, and self-reported adherence to treatment to name a few.

### Concerns with Measurement

Although a thorough discussion of the concerns with measurement of physical health and disease is beyond the scope of this entry, a few of these issues will be highlighted. First, subjective measures of health can be problematic in that it is difficult to tease out the psychological and social processes that influence symptom reports. For example, it is known that negative affect (NA) can influence the way people respond to self-report measures, primarily by increasing their report of negative symptoms and body sensations. Conversely, optimism and positive affect (PA) influence the report in the opposite fashion making it difficult to discern whether subjective measures are a true indicator of objective health, or if they are instead gauging participant mood and disposition. Self-reports of health and illness could also be subject to socially desirable responding. For instance, studies of smoking behaviors or sexually risky practices may lead participants to *underreport* behaviors considered socially undesirable or unhealthy and *overreport* desirable behaviors such as exercise and nutritional adherence.

Many illnesses have symptoms that are confounded with emotional disorders. A person with cancer may be experiencing a loss of appetite and increased sleep, both of which also are diagnostic symptoms of depression. As a result, it is desirable

not only to consider the effect of the disease on affect, but to also ensure that your study research design accounts for this problem. For example, if you are interested in whether affect plays a causal role in a health outcome (e.g., does happiness decrease the probability of getting a disease?), it is best to find a healthy population and assess affect *before* the disease is present to ensure that your independent variable is not confounded with health at baseline.

Finally, although it is tempting to interpret some objective measures of physiology as health outcomes, this conclusion is not warranted. For example, changes in immune parameters, heart rate, or blood pressure are interesting because of their theorized pathways to various disease outcomes (i.e., cancer, heart disease); however, in studies examining the psychosocial impact on these outcomes, the magnitude of change found is rarely outside of normal levels. Furthermore, it is even rarer for these changes to be tied to true illness outcomes making their interpretation suggestive of health at best.

From this brief discussion, it should be clear that relying solely on subjective reports of health and illness is problematic and the most rigorous designs should include objective as well as subjective measures of health and/or disease (depending on the nature of the investigation). With these issues in mind, we now provide an overview of the literature on positive psychological constructs and physical health. This review is not meant to be exhaustive; rather it is to provide a snapshot of the physical health outcomes that have been tied to positive feelings and cognitions, specifically positive affect and optimism.

## Summary of Health Evidence

### Longevity

The best evidence for the beneficial effects of positive traits on health is in studies of life duration in healthy populations. Most studies have been conducted with elderly persons living either on their own or with their families. This work provides virtually unanimous evidence that positive dispositions are linked to increased longevity. Similarly, studies of young and middle-aged adults have similarly found benefits of positive feelings on longevity, including a well-publicized study by Danner, Snowden, and Frieson in 2001 showing that a more positive writing style in early adulthood predicted longevity 65 years later in a sample of nuns. One earlier study of children by Friedman and colleagues, on the other hand, found that cheerfulness at an early age predicting *greater* risk for earlier death; however, in this case PA was reported by parents and teachers and not by the participants themselves making the interpretation of the PA measure unclear.

### Morbidity

Cross-sectional studies not surprisingly show that having one of many types of diseases is associated with lower PA than healthy controls. It is, however, likely that reports of lower PA in those suffering from disease, pain and disability are

primarily attributable to the influence of the disease on PA rather than the influence of PA on disease. Interestingly, although PA may decrease in response to the onset of serious physical illness, there is some evidence of adaptation over time where PA returns to levels reported by healthy people. Prospective studies of morbidity also are consistent in the positive effects of PA on a variety of outcomes. For example, PA has been associated with lower rates of stroke, rehospitalization for coronary problems, fewer injuries, decreased incidence of the common cold and improved pregnancy outcomes. Researchers have also found that higher levels of optimism are associated with morbidity such as fewer post surgical complications, and fewer new coronary events in a sample of cardiac patients. Similar, to the previously mentioned pregnancy finding, several studies have also found that optimism benefits gestational age, birth weight, and is associated with decreased pregnancy loss.

### Disease Severity

Naturally occurring positive emotions and optimism have been associated with a variety of benefits for disease severity. For example, naturally occurring PA has been associated with better lung function in asthmatics and decreased hospitalization. Optimism has been tied to better outcomes in cardiovascular disease patients, but to date there is no evidence that PA benefits cardiovascular disease patients most likely due to the focus in the heart disease literature on negative emotions such as hostility and depression.

Laboratory studies of patient populations (e.g., irritable bowel, asthma) studying the impact of induced emotion on symptoms tend to *not show* benefits of positive emotions, and in fact often show symptom exacerbation. This is likely due to the physiological arousal experienced along with the laboratory mood manipulations that attempt to induce intense emotions.

### Survival

Survival studies are prospective studies of groups of those suffering from serious (often fatal) diseases. Although it is a popular idea that staying happy can lengthen one's life when facing a life-threatening illness, *few* studies have examined whether this is the case. To date, the evidence suggests that individuals with diseases with the potential for long-term survival (i.e., years) such as early stage HIV and breast cancer benefit from higher levels of PA, while those with end-stage illness such as metastatic breast cancer, lung cancer and end-stage renal disease are not helped by PA and optimism and are sometimes harmed possibly due to the underreporting of symptoms resulting in poorer care and decreased treatment adherence. It may be that at disease end stages, once the body has progressed to an advanced weakened state, positive feelings and expectations are most beneficial for quality of life outcomes rather than extending life duration. Along these lines, studies of

institutionalized elderly, who often have an array of health difficulties and are often in a weakened state, similarly find no objective benefit of PA on survival.

### Subjective Health

Recently, Pressman and Cohen noted in their review of the health benefits of PA that there is a great deal of evidence indicating that PA is associated with reporting less physical pain (both naturally and when experimentally induced), fewer symptoms and reports of better health. Although these outcomes have practical importance, as we stated previously, findings have suggested that this association may be driven primarily by PA influences on *how* we perceive our bodies rather than by affect-elicited changes in physiological processes. Although these data are provocative, many of these studies also found that NA was associated with greater symptom reporting and poorer self-reported health, begging the question of whether NA or PA is responsible for the found effects. Although problematic for interpretation purposes, there are several studies that provide evidence that PA effects on self-reported health are independent of and often stronger than those of NA.

There are also a number of studies tying optimism to subjective health measures. For example, several researchers have found more optimistic samples of older individuals and patient populations report less pain. Similarly, there are ample studies tying optimism to better perceived health and physical function in both patient and healthy populations. Finally, there is consistent evidence that optimism is tied to the report of fewer physical symptoms (e.g., upper respiratory infection symptoms, disease specific symptoms) in both diseased and nondiseased populations.

## How do Positive Psychological Constructs Improve Health?

Higher trait PA is associated with better health practices such as improved sleep quality, more exercise, and with lower levels of the stress-hormones epinephrine, norepinephrine and cortisol. PA has also been tied with other health relevant hormones including increases in oxytocin, growth hormone and secretion of endogenous opioids as well as to alter various aspects of immune function. Finally, PA may also influence health by improving social relationships that have been repeatedly associated with both lower risk for morbidity and mortality.

Positive cognitions such as optimism, on the other hand, may influence health in a different fashion. The expectation that good things will happen or that one has control over a situation is more likely to operate via a person's ability to cope with stressful life events and potentially by increasing feelings of PA. Interestingly, researchers have also hypothesized that PA plays a role in the stress buffering process via its association with the building of resources (social, intellectual, and physical) that might help when negative life events occur suggesting both direct and stress-buffering pathways for PA's influence on health.



There is a great need for further studies assessing health outcomes to measure these psychosocial and biological pathways to understand better the mediators of these associations as well as whether PA and optimism influence health in a direct or indirect fashion.

## Discussion

Overall, the literature to date is provocative and shows many benefits of positive psychological constructs on physical health; however, many studies reviewed here also suffer from methodological and conceptual limitations. For example, in many cases, it is difficult to distinguish between the effects of positive and negative emotions. Many studies include bimodal measures of PA/NA or do not statistically control for levels of negativity. This raises the question of whether any found benefits of PA are due to its presence or merely the absence of NA. There are, however, promising results from the few studies that have controlled for NA which suggest that when it is statistically controlled, the PA effects remain associated with better health and are often more powerful than those of NA.

Another important issue to consider is the adequacy of measures of baseline health in prospective studies. Inadequate measurement allows the possibility that being healthier at baseline contributes to both greater baseline PA and to subsequent longevity. As mentioned in the introduction and in the reviewed literature, perceived health is highly correlated with positive constructs. This suggests then that any study using a self-reported health measure at baseline may be inadvertently assessing PA and/or optimism. On a related topic, some PA adjectives such as *alert* and *full of pep* might directly tap perceived health; a predictor of mortality above and beyond objective health assessments. To the extent that PA measures are actually markers of perceived health, it is possible that the association between PA and mortality may be attributable to existing medical conditions or subclinical illness. It is noteworthy that the PA-health association remains in the majority of studies that control for perceived health.

Another important issue to consider is *what it is* about these constructs that benefits health. Pressman and Cohen recently raised the issue that many measures used in assessing PA and physical health are confounded by nonemotional items such as those assessing optimism, esteem, extroversion, and perceptions of control. Since it is rare for studies to assess one type of positive construct while statistically controlling for other positive measures, it remains unclear whether various types of positive measures uniquely predict different health outcomes or if some scales are more powerful than others. Furthermore, even within measures of one type of positive construct, it remains unclear which components of that construct are necessary for health benefits (e.g., within PA is it calm, happiness or vigor?). Future research should assess whether it is overall positive nature driving these effects or whether we should be considering specific types of positive items.

## Suggestions for Those Interested in Assessing Physical Health and Positive Constructs

We suggest that if you are interested in moving forward in this field, there are several strategies to consider. First, given the limitations of subjective reports of health and their strong associations with positive psychological constructs, objective measures of health should be included in studies whenever possible to prevent limited interpretative ability of the study. Second, given the large literature on NA measures and health (e.g., depression, hostility) it is important to measure both positive and negative measures to determine if found effects are independent from the negative measures, confounded, or more powerful. Research must begin to determine whether these constructs are merely bipolar opposites predicting the same health outcomes in reverse directions, or whether in some health outcomes one is a better predictor than the other. Finally, if you are interested in whether positive constructs *cause* differences in physical health, cross-sectional designs are not sufficient. One must design longitudinal, prospective studies with baseline measures of PA and baseline controls for both perceived and objective health to get around any potential confounds of the influence of positive measures on self-reported health measures as well as the influences of health on report of PA and optimism.

SEE ALSO: ► Cortisol ► Immune system ► Optimism ► Oxytocin  
► Positive affectivity

## Play

Sandra W. Russ, Beth L. Pearson, and Sarah Cain Spannagel  
*Case Western Reserve University*

Pretend play is a resource for children that relates to adaptive functioning in the developing child. Because processes in play have been associated with optimal functioning, play can be considered within the positive psychology framework. Pretend play has long been recognized as important in child development. Pretend play involves the use of fantasy, make-believe and symbolism. In 1987, Fein defined *pretend play* as symbolic behavior in which “one thing is playfully treated as if it were something else” (p. 282). Both cognitive and affective processes are utilized in play. Jerome and Dorothy Singer in 1990 identified many cognitive processes in play. For example, play involves practice with divergent thinking – the ability to generate ideas. Play also involves the ability to store and recombine images; transformation abilities; and organization of narratives. They also emphasized the importance of affective processes in play. Sandra Russ in 2004 identified possible affective processes such as the expression of emotions and affect themes and enjoyment of the

play process. Play is also an arena where children learn to process and regulate emotions. Anna Freud was one of the first to recognize the importance of play in helping children to express and resolve emotional problems and conflicts. Her work led to the utilization of play in play therapy approaches.

In the research literature, play has been found to relate to or facilitate areas of adaptive functioning including creativity, perspective-taking and emotional understanding, and general well-being and adjustment. Pretend play has been found to relate to measures of creativity in children, especially to divergent thinking, ability in a number of different studies, in different research labs with different ages of children. The relationship between pretend play and creativity is one of the most robust in the play research literature. There have been a number of well-executed experimental studies that have found that play facilitated divergent thinking in preschool children. Methodological issues have been raised about possible experimenter bias in the play and divergent thinking literature. However, both Dansky in 1999 and Russ in 2004 pointed out, that studies controlling for experimenter bias also found positive results. Theoretical explanations of the relationship between pretend play and creativity have focused on the cognitive variables of divergent thinking, recombination of objects and ideas, symbolic transformation, breadth-of-attention deployment, and the loosening of old cognitive sets. Russ has focused on the affective processes in play as another possible explanation for the link between play and creativity. Theoretical explanations for the links between play, affect and creativity have been in existence for some time, although research that tests the theory is relatively recent. Both psychoanalytic theory and more recent cognitive-affective theories of mood and memory hypothesize that the search process for associations is broadened by the involvement of emotion. This broadened search process increases the generation of ideas and original associations in divergent thinking and other creativity tasks. In order to test these theories, measures of play must assess affective components of play. Using the Affect in Play Scale, a standardized play task developed by Russ, studies have found that the amount of affect expressed in a 5-minute play session relates to divergent thinking in children, usually independent of IQ. Future research in the play and creativity area should investigate specific components of both play and creativity.

Play also has been found to relate to perspective-taking and understanding the point of view of the other person. In 2000, Harris proposed that imaginative understanding may enable children to understand others' mental states and affective experiences. The research is beginning to support this hypothesis. The ability to understand others' emotions provides the basis for empathy. There is also a literature on "rough and tumble" play, discussed by Pelligrini in 1992, that relates this kind of interpersonal playful interaction with prosocial problem-solving ability.

Play also relates to aspects of general adjustment in children. Pretend play ability is related to coping ability in children. Children who show imagination in play can think of more ways to cope with stressful situations. It is possible that divergent thinking ability is the common ability that links play to the ability to generate problem-solving strategies. Play helps well-being and adjustment in other

ways. A number of studies have found that play reduces anxiety. When play intervention studies are focused and well-controlled, play has been found to reduce fears and anxiety around medical procedures and around issues of separation. Several studies suggest that imagination and fantasy components of the play are key factors in reducing anxiety.

Play should also enable children to be hopeful. One aspect of hope, according to Snyder, is agency, or a child's sense that he can reach his goals. Part of what makes play so pleasurable for children is that within play, unlike the rest of their day, children can be powerful. In play, children can arrange toys anyway they like; they can choose which character to be and how to respond. In this way, the child feels a sense of agency.

## Intervention and Prevention Programs

Given the important role that pretend play has in child development and in children's adaptive functioning, it is essential that we determine whether we can teach children to be better players. There is some evidence that play skills can be improved. Dansky (1999) reviewed the play tutoring literature and found that "more than a dozen studies have shown that play tutoring can increase not just the quantity of play displayed but also the richness and imagination of children's pretense" (p. 404). These play tutoring sessions usually involved 8 to 12 sessions with an adult who modeled and encouraged participation in social interactive pretense over a 3- to 6-week period. In his review, he concluded that there were consistent positive results in studies with adequate control groups. He concluded that play tutoring, over a period of time, resulted in increased imaginativeness in play and increased creativity on other measures.

J. Singer and D. Singer in 1999 have developed a video-based program for parents and other caregivers of preschool children. The video and manual provide clear examples and instructions for parents and caregivers that model how to use play to help children use their imagination and to learn through play. For example, in a going-to-a-restaurant pretend play situation, just a few of the skills the children learn include taking on different roles, doing tasks in sequential order, and counting. In a recent study using this intervention, Bellin and Singer found that play helped children develop literacy skills.

Russ, Moore, and Pearson have been developing play interventions that target creativity, well-being, hope, anxiety, and school adjustment. Results of these pilot intervention studies have been promising.

## Future Research

Because play is so important in child development and there is a growing body of research that relates play to many areas of adaptive functioning, future

research programs in the play area are crucial. Important future research programs need to:

- Identify which play process relate to different areas of adaptive functioning.
- Develop play intervention manuals that target specific processes in play.
- Integrate play intervention and prevention programs into a child's day at school and at home.

The importance of pretend play in child development is being rediscovered. In this age of heavy scheduling and increased demands on children and parents, it is important that children have the time to play – so they can develop optimally. Research studies are building an empirical foundation for the importance of pretend play.

SEE ALSO: ► Creativity ► Hope ► Positive emotions

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## Pleasure

Danielle Johnson  
*University of Kansas*

*Pleasure* is a term used to describe a range of positive affective, emotional, and physical sensations. Pleasure is a major component of the developing field of positive psychology, as it encompasses the essence of what is associated with positive functioning. The aspect of pleasure as it relates to positive functioning, describes a niche of how we interpret and understand positive functioning. For example, a state of gratification implies a more sensate or physical pleasure, whereas “a source of delight or joy” implies an emotional state. Most people can reach a consensus that getting a back rub (sensation) is pleasurable, or immediate response when surprised with a dozen roses (affect), or the feeling evoked when being praised for a great performance by a demanding boss (emotion) as pleasing, but there is no blanket or objective rule to describe what pleasure is for every person, although some of the physiologic responses related to pleasure can be identified. The broadness and subjectivity of pleasure has long been examined and debated and has been examined from a number of perspectives.

The historical context from which pleasure is most notably recognized is from the writing of the psychoanalyst Sigmund Freud. In his writings and discussions of human behavior he wrote about the “pleasure principle.” Freud explained the pleasure principle as the motivating force in human behavior; the need for immediate gratification of pleasure and avoidance of pain. In this context pleasure has been characterized as something that is negative or problematic. The negative association attached to the use of pleasure in this manner stems from pleasure being described as something that needed to be satisfied regardless of the outcome or consequence. A shift from using pleasure to describe that level of extremity in the pursuit of pleasure has been relegated to a term that dates back to the 1800s, *hedonism*, which is pleasure being the purpose in life. Today, hedonism would be analogous to Freud’s pleasure principle. The definition of pleasure has broadened since its usage by Freud to include things other than a behavioral reaction and has taken on a general descriptor of something that positive or good.

As the research and understanding into human strengths and positive emotions expands so does the subjective understanding of pleasure. Pleasure at its widest definition can be described as an umbrella term to describe positive emotions and sensations. Although pleasure encapsulates a number of descriptors, it can be viewed as being on a continuum of positive emotions in which pleasure is close to an extreme form of happiness. To understand the range of possibilities that fit under the pleasure umbrella an examination of the key terms, concepts, and theories will be discussed.

The exploration of positive emotions has allowed for the development of a number of theories that account for or explain the presence of pleasure. The *broaden-and-build* theoretical model is one such model that suggests that positive emotions can expand the number of possible reactions one has to choose from. The implications of this model suggest that the higher the number of positive emotions, the more options we are able to perceive to accomplish tasks and goals. The model is represented by an upward spiral of emotions. *Need/goal satisfaction theories* postulate that pleasure is achieved when tensions are reduced. Freud’s pleasure principle fits under this group of theories. *Process/activity theories* espouse that certain activities can generate happiness. There is a debate within this camp in regards to if engaging in certain activities produces happiness or if the process of engaging causes happiness. A related concept under these theories is flow. *Flow* is the engagement in completing an activity in which one’s skills are matched to complete the challenge. The emotional response of being in flow with the task is one that would be described as pleasure.

Another group of theories that account for pleasure is the *genetic and personality predisposition theories*. This group of theories suggests happiness is a stable variable that does not change significantly due to environmental or situational events. A term that is related to this group of theories that lends to an overall stable view is *subjective well-being*. Subjective well-being is a term to describe how the world is viewed subjectively, taking into account level of life satisfaction and presence of positive affect, with no negative affect being present. Subjective well-being

is associated with *happiness* and as already mentioned, a subjective term, which is assessed with the use of self-report measures.

As pleasure is described as an emotional reaction to an event, current research is focused on pleasure being segmented into two categories, one being the biological basis and reactions of pleasure and the other category being pleasure as it relates to other variables. The research into the biological basis of pleasure, looks at the concept at a neurochemical level, attempting to understand how we respond neurologically to pleasure. This type of research seems to be working towards making the mind-body connection a more concrete idea, allowing a greater understanding of the physical response of pleasure on a microlevel. The other category of current research on pleasure aims to understand the circumstance in which pleasure is evoked and how that can impact other areas of functioning.

Pleasure in and of itself is not an isolated concept and is more of a response to stimuli. The other arm of research looks at pleasure from its relationship to other variables. Pleasure and such items as food intake, health behaviors (i.e. exercise, smoking, and sex for example) motivation, risk taking, and learning are some of the current focuses of research. Personality functioning and the impact of pleasure seeking is an area in which psychological research is being executed, to identify how pleasure seeking affects overall personality functioning. Much of the research on personality and pleasure is being examined from a psychoanalytic perspective, and serves to explain how the pursuit of pleasure fits into certain personality types. The defining and researching of pleasure, has allowed the development of scales to assess pleasure.

There are scales used to assess anhedonia, or the inability to experience pleasure. These scales are used in research to assess depression, in which anhedonia is one criterion that must be met to be diagnosed with clinical depression. Some of the most recognized measures of pleasure are the Snaith-Hamilton Pleasure Scale (SHAPS), the Fawcett-Clark Pleasure Capacity Scale (FCPS), and the Revised Chapman Physical Anhedonia Scale (CPAS). The SHAPS measures ability to experience pleasure in the last few days, with a higher score indicating greater pleasure capacity. "I would enjoy my favorite television or radio program," is an example of the type of question found in this measure. It assesses anhedonia by measuring: interest/pastimes, social interaction, sensory experience, and food/drink. The FCPS measures ability to experience pleasure by responding to questions based on their current state (i.e., "You sit watching a beautiful sunset in an isolated, untouched part of the world"). Higher scores indicate greater pleasure capacity, by assessing social activities, sensory experiences, and mastery of challenging tasks. The CPAS taps the feelings and interests about normally pleasurable events and activities (i.e., "The taste of food has always been important to me"). The CPAS is different from the other two measures discussed previously, in that this scale measures pleasure characteristics over the lifetime, instead of recent experiences.

All three measures were able to differentiate between depressed and non-depressed, with some measures being able to differentiate between melancholic and nonmelancholic depression (FCPS, CPAS). The close correlation between

anhedonia and depression, is one that often prevents the ability to find or feel pleasure in events of daily life. The implications of this research will be valuable in the development of tools to assist in increasing the ability to find or feel pleasure in those that are depressed. The availability of psychometrically validated instruments will further inform the field of psychology's understanding of the measurement and quantification of positive emotions.

As mentioned when discussing the concepts and theories associated with pleasure and the scales used to measure it, there is no way to objectively measure pleasure. The inability to objectively measure pleasure limits the context in which the term is applied. The word is also limited by another context in which it may be used, the cultural context. In some cultures pleasure is not in the vocabulary or something that has a positive connotation. While this term is something to further understand in the pursuit of positive psychology it is one that must be utilized in the correct cultural context. The understanding of pleasure as an emotion and a sensation is one that continues to be developed through continued research, to guide the development of strength's based approach in psychology and in the promotion of positive human functioning.

SEE ALSO: ► Amusement ► Broaden and build theory of positive emotions ► Euphoria ► Hedonics ► Positive emotions

## Positive Affectivity

Kristin Naragon and David Watson  
*University of Iowa*

*Positive affectivity* is a trait that refers to stable individual differences in the experience of positive emotions and active engagement with one's surroundings. Along with negative affectivity (the parallel tendency to experience negative emotions), positive affectivity is one of the two basic dimensions that define long-term affective experiences. Individuals who are high in positive affectivity tend to be cheerful, enthusiastic, energetic, confident, and alert. In contrast, those who are low in positive affectivity tend to experience lower levels of happiness, excitement, vigor, and confidence. Positive affectivity is a moderately stable trait over time and individuals tend to report consistent levels across different situations, such as being alone, interacting with others, or working.

## Defining Positive Affectivity

### Biobehavioral Links

Positive and negative affectivity are relatively independent of one another, which means that they can occur in a widely varying range of combinations (e.g., an



individual can be high in both traits or low in both traits). They may be seen as the subjective components of larger biobehavioral systems that have evolved to promote the survival of animals. Positive affectivity is related to the behavioral facilitation system, an approach system that directs organisms towards rewarding and pleasurable situations, such as food, shelter, and sex. This system is linked primarily to dopamine activity and the level of resting activity in the left prefrontal cortex. In contrast, negative affectivity is related to the behavioral inhibition system, which protects organisms by encouraging the cessation of actions that may result in injury or death. The behavioral inhibition system is associated with activity in the right frontal cortex. Given the different evolutionary pressures that gave rise to these biobehavioral systems, it is not surprising that positive and negative affectivity are relatively independent and have different correlates.

### Specific Content

There is not a strong consensus regarding the specific content that defines positive affectivity, with different prominent self-report measures containing different sets of scales. In these measures, respondents rate the extent to which each mood adjective or phrase is characteristic of them. The Differential Emotions Scale (DES) has positive affectivity scales assessing enjoyment (e.g., *happy*, *joyful*) and interest (e.g., *excited*, *alert*, *curious*), while the relevant scales in the Multiple Affect Adjective Checklist – Revised (MAACL-R) consist of a broad measure of positive affect that includes terms from both DES positive affectivity scales, and a second scale assessing sensation seeking (e.g., *daring*, *adventurous*). In contrast, the Profile of Mood States (POMS) has a single scale (vigor) that assesses the domain of positive affectivity.

The Expanded Form of the Positive and Negative Affect Schedule (PANAS-X) has the most differentiated conceptualization of positive affectivity, consisting of three core scales: Joviality (e.g., *cheerful*, *happy*, *lively*); Self-assurance (e.g., *confident*, *strong*); and Attentiveness (e.g., *alert*, *concentrating*). The structure of the PANAS-X has been supported by numerous factor analyses; moreover, the data have established that these positive affectivity scales measure related but ultimately distinctive mood states. Unfortunately, little information is currently available regarding the convergent validity of the above commonly-used measures of positive affectivity.

### Related Constructs

Positive affectivity can be distinguished from several related constructs. Happiness, subjective well-being, and self-esteem are all correlated with positive affectivity; however, in addition to high positive affectivity, they also include an element of low negative affectivity. The personality trait of extroversion is also related to positive affectivity, although extroversion is a broader construct that includes social and interpersonal components, in addition to positive affectivity.

## Causes and Correlates of Positive Affectivity

### Genetic Influences

The small relevant literature indicates that positive affectivity is a moderately heritable trait. Twin studies utilizing the Well-being scale from the Multidimensional Personality Questionnaire (MPQ) have reported heritability estimates ranging from .40 to .50, while other heritability estimates range from .36 to .45. These studies found that the common rearing environment essentially has no effect on the development of the trait. The larger literature on the heritability of the related trait of extroversion supports these findings: Heritability estimates hover around .50 and the data again show little effect from the shared rearing environment.

### Demographic and Cultural Variables

The above genetic studies indicate that the rearing environment plays a very minor role in the development of positive affectivity; similarly, a substantial body of evidence suggests that demographic variables also generally have little impact on positive affectivity. For instance, age, gender, marital status, ethnicity, income, and socioeconomic status are all relatively weak predictors of positive affectivity and happiness. However, there are two demographic variables that seem to be important for positive affectivity: social activity and religious/spiritual involvement. Positive affectivity is correlated with various indices of social behavior, such as the number of friends and the number of hours spent socializing. The influence of positive affectivity and social activity seems to be bidirectional: those high in positive affectivity are motivated to seek out social and affiliative activities; conversely, socializing tends to increase state positive affect. In addition, those who consider themselves religious or spiritual also report increased positive affectivity. This association may be due to a stronger sense of meaning or purpose in life, as well as the fact that religious groups provide a community and, hence, the opportunity for social activities.

There is no clear evidence for mean level differences in positive affectivity across cultures, but some studies suggest that individualist, rich, and democratic cultures may have higher levels of subjective well-being than collectivistic, poor, and totalitarian cultures. Cultural individualism versus collectivism may be especially important in determining how consistent an individual's level of positive affectivity is across various situations, such as working or being alone. For instance, Oishi and colleagues found that the situation had a greater impact on the positive affectivity levels of members of more collectivist cultures, whereas members of individualist cultures tended to remain consistent in their positive affectivity levels, regardless of the situation.

## Current Research Applications

### Psychopathology

Numerous clinical disorders are characterized by low positive affectivity, including social phobia, agoraphobia, posttraumatic stress disorder, schizophrenia, eating disorders, and the substance use disorders. However, low positive affectivity plays an especially salient role in the mood disorders. In particular, prospective data have shown that low positive affectivity levels predict the future development of depression. These findings raise the intriguing possibility that a lack of positive affectivity may be an important vulnerability factor for the mood disorders. The association between the mood disorders and positive affectivity also may help to explain the cyclic course of the mood disorders. Given that positive mood normally follows a daily cyclical course of waxing and waning, the mood disorders may be seen as a dysregulation or exaggeration of this pattern. The cycling of mood disorders is most apparent in the bipolar disorders, in which the individual fluctuates between well-defined episodes of mania (or hypomania) and depression. Melancholic depression and seasonal affective disorder also are characterized by marked cyclical patterns.

### Job and Marital Satisfaction

Positive affectivity plays an important role in both job and marital satisfaction: Because people high in positive affectivity tend to feel good about themselves and their life, it is not surprising that they also report greater satisfaction in these important life domains. For instance, positive affectivity was a significant predictor of job satisfaction, even when it was measured two years prior to the measurement of job satisfaction. Other studies have shown that positive affectivity is strongly related to personal accomplishment (i.e., an individual's sense of adequacy and effectiveness on the job) and organizational commitment. Positive affectivity is also moderately associated with marital satisfaction, with correlations ranging from .24 to .48. It should be noted that marital satisfaction and job satisfaction are themselves linked, and there is some evidence that mood (particularly positive affect) may mediate this relationship.

### Physical Health

Positive affectivity is associated with physical health, with high positive affectivity predicting increased longevity in the elderly population and resistance to developing infectious illnesses. Positive affectivity is also correlated with better physical health in studies using subjective report: Among both diseased and healthy populations, those who are higher in positive affectivity report fewer symptoms and less pain. In addition, there is some evidence that positive affectivity may have

more impact on how people *perceive* their health and bodies, rather than their actual physical condition. Positive affectivity may also affect health through its association with healthy behaviors such as sufficient sleep and increased exercise. Finally, positive affectivity levels may directly impact physiological processes (such as neurological and hormonal activity) that are relevant to physical health.

SEE ALSO: ► Appetitive motivational systems ► Happiness  
► Job satisfaction ► Physical health ► Self-esteem ► Well-being

## Positive Emotions

Jeffrey J. Froh  
*Hofstra University*

Positive emotions are brief experiences that feel good in the present and increase the chances that one will feel good in the future. They seem to be essential ingredients in the recipe of living the good life. Understanding positive emotions is a core objective of positive psychology.

The study of emotions in psychology is relatively recent, with emotions only being the subject of sustained empirical scrutiny since the 1960s. Even then, the empirical focus was almost always – and almost always exclusively – on negative emotions. Groundbreaking researchers, including first Alice Isen and subsequently Barbara Fredrickson, started to give systematic attention to positive emotions from the 1980s onwards, and there is now a growing body of evidence to support their occurrence and implications. There is, however, consistent evidence that people generally have a bias toward attending to the negative, which may in large part account for the absence of research into positive emotions until the last 20 years or so.

## Neglecting Positive Emotions

There is a general bias to give more weight to negative entities (e.g., emotions and personal traits) compared to positive entities. Generally, negative events and information seem to command more attention over positive ones. This makes sense from an evolutionary perspective. Someone who misses a positive outcome may later experience regret for not experiencing pleasure or growth, but they'll survive. In comparison, someone who fails to notice danger may suffer the ultimate negative outcome – death.

Baumeister and colleagues argue that bad is stronger than good across many psychological phenomena. For example, bad impressions and stereotypes form more quickly and are more difficult to alter compared with good ones. People get more

upset over losing \$50 than they are happy winning \$50. Bad events influence both good and bad moods, whereas good events only influence good moods. Having a good day will unlikely influence someone's next day, but having a bad day will likely influence someone's next day – for the worse. Numerous types of trauma, even if it's a sole occurrence, can have severe and lasting negative effects on behavior, but research doesn't support the idea that a sole positive event can have similarly strong and lasting effects. For example, being sexually abused once can have long-term deleterious effects. One experience of sexual bliss has not been shown to predict comparable long-term positive effects.

Thanks largely to Isen and Fredrickson, empirical evidence supporting the role of positive emotions in promoting personal growth and development is accumulating. By increasing our thought-action repertoires (i.e., by broadening our cognitive and behavioral flexibility and options) and subsequently engendering physical, intellectual, and social resources, positive emotions improve coping and thus build resilience. Resiliency, in turn, predicts future occurrences of positive emotions. With positive emotions demonstrating such robust relationships to goal-achievement, physical and mental health, and other positive outcomes, it makes sense for psychology to further the understanding of positive emotions.

In her seminal article *What Good Are Positive Emotions?* Fredrickson suggested that positive emotions receive less attention than negative emotions for several possible reasons. First, compared with negative emotions, positive emotions are limited in quantity. The English language reflects this disparity. More words exist describing negative emotions relative to positive ones. Positive emotions, compared with negative ones, also don't have distinct facial expression or autonomic responses. Someone experiencing gratitude may express appreciation with relatively little behavioral or physiological change. An angry person, in contrast, may have snarled lips, a fist pumping, and a raised sympathetic nervous system response (e.g., increased blood flow to the muscles). While uncertain if the beneficiary experienced gratitude, it's evident that the fist-pumping individual is angry.

Second, some argue that psychology wears problem-focused lenses. It focuses on the negative. Although aiming to reduce negative emotions is an integral part of treatment, it may be insufficient for facilitating positive emotions, especially since some suggest that negative and positive emotions operate largely independently. Mental illness, usually involving negative emotions, is associated with more missed workdays, unhealthy psychosocial functioning, poorer physical health (e.g., cardiovascular disease), and limited daily activities. It therefore makes sense, some argue, to put the investigation of negative emotions ahead of positive ones. Positive emotions, however, have been shown to both undo and decrease physiological responses triggered by negative emotions (e.g., increased heart rate). Promoting positive emotions may be a fruitful psychological investment in the long-term.

Finally, emotion theorists have aimed to appreciate emotions in general. Emotion specific models largely reflecting prototypic emotions (e.g., anger, fear) have thus developed. But understanding anger doesn't necessarily lead to a greater

understanding of joy, hope, or gratitude. A different theory is needed for positive emotions, and it was this theory that Fredrickson developed.

## The Broaden-and-Build Theory of Positive Emotions

A single general-purpose model of emotions inadequately describes positive emotions. This realization sparked Fredrickson to develop her broaden-and-build theory of positive emotions. Negative emotions narrow our focus and restrict our behavioral range. Fredrickson argued that positive emotions yield nonspecific action tendencies beyond physical action. She proposed that positive emotions generate broad thought-action repertoires that ultimately build enduring physical, intellectual, and social resources.

Regarding physical resources, certain species use similar maneuvers during play and survival situations. For instance, while playing young patas monkeys run into foliage and catapult themselves away from their playmate. Adults in this species do the same when running from predators. The physical skills used and acquired during play apparently aid in survival.

Intellectual resources can be built via experiencing positive emotions such as joy. Here, joy will trigger explorative behaviors, subsequently engendering greater knowledge about one's environment. This information may prove useful in the acquisition of basic and applied knowledge. To illustrate, a young child who is securely attached to his caregiver will likely feel comfortable exploring his surroundings. Doing so he may learn both who is in the environment (i.e., basic knowledge) and who is approachable enough to help in the future if needed (i.e., applied knowledge). Hence, he has built enduring intellectual resources.

Social resources can be built via the experience and expression of gratitude – one of the more popular empirically studied positive emotions. Gratitude doesn't prompt one to reciprocate benefits in a tit-for-tat fashion. Instead, it can stretch one to repay kindness creatively. Fredrickson suggests that these new methods for repaying kindness can become enduring skills in someone's repertoire for strengthening relationships and building social capital. Indeed, grateful individuals may act prosocially as a way of merely expressing their gratitude. Over time, however, these actions can have lasting impacts on people's social relationships. Gratitude helps build trust in social relationships. Thus, gratitude may serve to maintain and build social resources.

A recent meta-analysis by Lyubomirsky, King, and Diener, in which the results of over 300 studies were aggregated, suggests that success engenders positive emotions – but also that positive emotions engender success. Indeed, happy people tend to live longer, make more money, and enjoy enduring loving relationships. One reason that positive emotions (e.g., happiness) might cause human flourishing could be because of the durable resources – physical, intellectual, and social – that were built over time. These resources can then be tapped into during times of adversity, as well as in times of growth.

## Positive Emotions: Past and Present

Research on positive emotions has changed over the past few decades. Beginning in the 1980s and continuing today, much of the research conducted by Isen is focused on the role of positive emotions in cognitive processes. Specifically, several studies investigated the effect of positive emotions on cognitive organization, problem-solving, and decision-making. The findings suggest that when people are experiencing positive emotions, they demonstrate broadened thinking by associating more unusual words with neutral words, and group more stimuli together (suggesting positive emotions are linked with processing material in a more integrated fashion); flexible thinking and creative problem-solving; and more conservative and self-protecting behaviors when meaningful loss is likely.

Although the role of positive emotions in cognitive processes (e.g., own-race bias) is still being studied, much of the focus is now on promoting well-being. Again, Fredrickson is at the forefront. In 1998, Fredrickson and Levenson tested the hypothesis that contentment and amusement speed recovery from the cardiovascular symptoms of negative emotions (i.e., elevated heart period, pulse transmission times to the ear and to the finger, and finger pulse amplitude). In the first study, 60 female undergraduate students were first shown a film-clip eliciting fear and then randomly assigned to view a second film-clip eliciting contentment, amusement, neutrality, or sadness. Compared to the students who viewed the neutrality or sadness film-clips, those who viewed the films eliciting positive emotions demonstrated significantly faster returns to pre-film levels of cardiovascular reactivity. In the second study, 72 individuals between the ages 20 and 35 viewed a film-clip known to elicit sadness. Participants' behavior was analyzed and coded for the occurrence of smiles. The 50 participants who spontaneously smiled at least once during the sad film returned to their pre-film levels of cardiovascular reactivity faster than those who didn't smile. Spontaneous smiling speeded recovery to pre-film levels of reactivity. Negative emotions, with their link to specific action-tendencies (e.g., fight or flight), consistently trigger cardiovascular activation (e.g., increased heart rate and blood flow to the muscles). Certain positive emotions, in contrast, may reduce this cardiovascular activation. This undoing effect of positive emotions will likely bring the organism back to prior levels of physiological activation and increase psychological openness to numerous action tendencies.

In 2000, Fredrickson, Mancuso, Branigan, and Tugade replicated – and extended – the undoing effects of positive emotions. In the first study, 170 undergraduate students were told they had 60 seconds to prepare a 3-minute speech on a to-be-determined topic. While no one delivered a speech, the goal of the experimental manipulation was to induce anxiety. Students were then randomly assigned to watch one of four emotion eliciting film-clips: contentment, amusement, neutrality, or sadness. Again, compared with the neutral or sad films, the positive emotions films produced faster cardiovascular recovery. One could argue, however, that the

positive emotions don't undo the cardiovascular reactivity of negative emotions, but instead simply replace the cardiovascular reactivity of negative emotions. The undoing hypothesis states that positive emotions produce specific cardiovascular activation only *after* negative emotions have already caused cardiovascular activation. The replacement hypothesis states that positive emotions – produced after either negative *or* neutral emotion induction – cause their own unique cardiovascular activation. To test the undoing versus replacement explanation, in the second study, 185 undergraduate students viewed the same films as in the first study after a neutral state. Results confirmed the undoing effect of positive emotions. The positive and neutral films produced statistically indistinguishable cardiovascular activation. Together, these studies suggest that positive emotions may help promote well-being by reducing the psychological and physical strain associated with cardiovascular activation, as well as the broadened mindset promoted by positive emotions, which is essential for building physical, intellectual, and social resources.

Fredrickson and Joiner tested if positive emotions triggered upward spirals of well-being. Using the broaden-and-build theory of positive emotions as a framework, they predicted that positive emotions and broad-minded coping (i.e., measured by items such as, “Think of different ways to deal with the problem” and “Try to step back from the situation and be more objective”) would reciprocally and prospectively predict each other. A study using 138 undergraduate students completed measures of positive emotions, negative emotions, and broad-minded coping at two time points 5 weeks apart. Initial positive emotions, and not negative emotions, predicted enhanced broad-minded coping 5 weeks later. Initial broad-minded coping predicted enhanced positive emotions 5 weeks later, but not reductions in negative emotions. Furthermore, initial positive emotions predicted positive emotions 5 weeks later partly because of increases in broad-minded coping during the 5 weeks. Initial broad-minded coping predicted broad-minded coping 5 weeks later partly because of increases in positive emotions. Overall, these findings suggest that positive emotions and broad-minded coping mutually build on each other. Positive emotions thus feel good in the present, but also increase the chances of feeling good in the future.

In 2003, Fredrickson, Tugade, Waugh, and Larkin found that gratitude, a particular positive emotion, was the second most commonly experienced emotion in the wake of the terrorist attacks on September 11, 2001 (out of 20 emotions, only compassion was more common). They found evidence that the experience of positive emotions helped resilient people actively cope with the tragedy. Mirroring this work in children, Gordon, Musher-Eizenman, Holub, and Dalrymple conducted a subsequent archival study of newspaper accounts about what children were thankful for before and after 9/11. It produced further evidence that gratitude plays an important role in coping – and for children as well. Themes of gratitude for basic human needs (i.e., family, friends, and teachers/school) increased after 9/11. Evidence suggests, therefore, that gratitude may be a powerful positive emotion for coping with adversity.



The research produced by Isen, Fredrickson, and colleagues strongly suggests that positive emotions are a good thing. They lead to more flexible and creative thinking and, over time, build enduring physical, intellectual, and social resources. Thus, the broaden-and-build theory of positive emotions provides a framework from which we can explain the link between positive emotions and subsequent goodness, resilience, growth, generativity, and longevity.

## **Future Directions**

Moving beyond the investigation of cognitive processes and into human flourishing is likely to continue being the research focus for positive emotions. This makes sense, since some argue that well-being interventions and positive psychotherapy are the most practical tools provided by positive psychology. Within the last decade global well-being has become a mainstream concern. Therefore, investigating the role of positive emotions in the functioning of nations around the world becomes increasingly important. It is likely then, that most positive emotions research in the future will be aimed at addressing the questions: How can we help people achieve sustainable well-being? What are the mediators for this augmentation? As has been shown with adults, counting blessings leads to positive emotions because of an increase in gratitude. What are the moderators for this augmentation? For instance, visualizing best possible selves seems to be an engaging strategy for young adults to become happier, while counting blessings may be more effective in older adults. Age, in this example, seems to matter. Furthermore, what are the specific positive emotions produced by these happiness-boosting interventions, and what are their links to specific life outcomes? Complicating matters even more, Rozin and Royzman state that the determinants of positive emotions are more idiosyncratic compared with negative emotions. Therefore, augmenting positive emotions is not likely to be a “one size fits all” solution. Rather, much time may be needed to tailor specific interventions for specific people. (This may explain why augmenting positive emotions in a laboratory setting seems to be comparatively more difficult than reducing negative emotions; it’s also the inherent difficulty of making public policy that’s aimed at augmenting citizens’ well-being).

With the growing field of positive developmental psychology, the following questions should be addressed: What environmental factors facilitate and inhibit specific positive emotions? Who experiences which positive emotions the most, and why? Why do some people seem to have all of the ingredients to experience positive emotions and don’t experience them? Why do some people seem to have a few of the ingredients to experience positive emotions and do experience them? Answering these and similar questions may help us to elucidate the well-springs of positive emotions, as well as develop a better understanding of the mechanisms, processes, and outcomes.

Finally, assessment, statistical analyses, and theories for positive emotions have improved. But more work is needed. First, we need to move beyond the traditional

self-report measures of positive emotions. For instance, in addition to using self-report measures, researchers now include behavioral measures of gratitude (e.g., distributing resources between partners as indicating prosocial behavior). Furthermore, according to Isen and Erez, we can also use conceptual validation, converging operations, discriminant validation, implicit measures, and investigate if the obtained results with the chosen operation are compatible with theoretical expectations. Second, advanced statistics such as growth curve analysis, latent class models, and those designed specifically for testing intraindividual differences (e.g., P-technique factor analysis) should be used. These will allow us to understand better the intricacies of positive emotions. Finally, Fredrickson significantly advanced the study of positive emotions with her broaden-and-build theory of positive emotions. Theories now need to be created for discrete positive emotions. Some of this work has already begun. For instance, in relation to gratitude, McCullough, Kilpatrick, Emmons, and Larson extensively reviewed the literature in developmental, evolutionary, social, and personality psychology. They proposed that gratitude serves three moral functions. As a *moral barometer*, gratitude signals to the beneficiary that a benefactor bestowed a gift upon him. As a *moral motive*, gratitude encourages prosocial behavior in the beneficiary either directly towards the benefactor or others. Finally, as a *moral reinforcer*, gratitude increases the probability that the benefactor will act prosocially toward the beneficiary in the future. Fredrickson's theory provides a solid framework for positive emotions in general. But since theory and research serially influence each other – and some positive emotions seem to serve specific functions beyond simply broadening one's thinking and building one's thought-action repertoires – specific theories for some of the specific positive emotions might further the field of well-being.

SEE ALSO: ► Broaden and build theory of positive emotions ► Eudaimonia  
 ► Happiness ► Hedonics ► Positive affectivity ► Well-being

## Positive Ethics

Samuel Knapp,<sup>a</sup> Michael C. Gottlieb,<sup>b</sup> and Mitchell M. Handelsman<sup>c</sup>

<sup>a</sup>*The Pennsylvania Psychological Association*; <sup>b</sup>*Independent Practice, Dallas, TX*;

<sup>c</sup>*University of Colorado at Denver and Health Sciences Center*

Positive psychology attempts to move the discipline of psychology away from an emphasis on pathology or illness to a discussion of the uplifting and emotionally fulfilling aspects of life. Similarly, positive ethics attempts to move the discussion of professional and scientific ethics away from “an almost exclusive focus on wrongdoing and disciplinary responses to a more balanced and integrative approach that includes encouraging psychologists to aspire to their highest ethical potential” (Handelsman, Knapp, & Gottlieb, 2002, p. 731). The ethics of psychologists need

not be restricted to a set of specific rules as promulgated by the current code of conduct and/or the laws of a particular jurisdiction. Ethics can also include affirmations of what is good, ideal, and valuable, and embrace the best of the world's rich professional, philosophical and religious traditions. Rather than being a static set of directives or a fixed entity of prohibitions, ethics can be a dynamic enterprise that allows psychologists to respond better to changing conditions and situations. "Most psychologists want to do more than just avoid being punished; they want to have a positive impact on others and excel in their profession" (Knapp & VandeCreek, 2006, p. 4). Traditional approaches to ethics often focus only on the minimum standards of the profession (the "ethical floor") or the sanctions that would be applied to the few who violate them. Positive ethics informs psychologists who strive for the ethical ceiling.

Although Handelsman, Knapp, and Gottlieb first used the term *positive ethics* in a peer reviewed publication, other scholars have expressed similar goals in which they indicate the limitations of looking at ethics only from the standpoint of obedience to rules. For example, Brown warned against concrete ethics that separate us from others, and Tjeltveit noted that ethical codes do not contain the highest levels of ethical excellence. Bricklin notes that ethics and law are not the same and should not be confused, and Kitchener urged psychologists to rely on foundational ethical theories to guide their behavior.

## **Positive and the Aspirational Principles of the APA Ethics Code**

Positive ethics is similar to the aspirational ethics or General Principles of the APA Ethical Principles of Psychologists and Code of Conduct in that it urges psychologists to live up to high ideals. It differs from the APA aspirational principles in that it: a) urges psychologists to integrate personal values and professional ethics; and b) recognizes that ethics may be approached from viewpoints other than the principle-based perspective found in the APA Ethics Code.

The APA Ethics Code clearly applies only to the "psychologists' activities that are part of their scientific, educational, or professional roles as psychologists" (APA, 2002, Introduction and Applicability) and not their private conduct. However psychologists, as most others, seek consistency between their personal and professional ideals, and prefer a career that allows them to live out their personal ideals. They hope for the opportunity to reflect upon their daily work with feelings of accomplishment and pride, and a sense that their work has value. Similarly, a positive ethics perspective encourages psychologists to clarify the ways in which they can fulfill their highest personal ideals through their careers, whether it is: teaching a new generation of students; assisting individuals with health and mental health concerns; or expanding the knowledge base of our discipline.

The positive ethics perspective also differs from the aspirational principles of the APA Ethics Code in that it does not endorse any one particular ethical theory.

Psychologists working from a positive ethics perspective may endorse principle-based ethics, virtue ethics, feminist ethics, Utilitarianism, or an ethical perspective based on a religious tradition.

## Implications of a Positive Ethics Approach

Of course a positive ethics perspective does not eschew the necessity for the societal regulation of scientific and professional psychologists' behavior. At times miscreants need to be sanctioned. But, education regarding psychology's standards may be more helpful if it includes an understanding of the ways in which disciplinary codes are consistent with generally accepted moral values. For example, Knapp and VandeCreek analyzed the 2002 APA Ethics Code and found almost all of the enforceable standards could be justified on the basis of principle-based ethics. However, discussions of ethics should go beyond just codes and laws. By themselves, external disciplinary controls are only concerned with minimum obligations; but from the perspective of positive ethics, psychologists should also be concerned with higher ideals.

A focus on positive ethics expands the options available to psychologists because it allows them to draw upon a wide range of philosophical and scientific perspectives when faced with an ethical issue. The criteria for judging an action ceases to be, "What must I do to avoid being disciplined?" and becomes, "What is the best way to promote my highest ethical ideals?" For example, many research psychologists want to protect research participants because it is an intrinsic good and actualizes their professional identities, even if doing so exceeds IRB requirements. Psychologists work to ensure their patients' fullest understanding and participation in the treatment process beyond just obtaining their signatures on an informed consent form. That is, positive ethics encourages psychologists to examine their behavior in light of the higher standard of promoting human welfare.

In addition, positive ethics encourages psychologists to articulate a framework that gives meaning and unity to their work. When one's ethics are alive, vital, pertinent, and creative, a psychologist can respond to ethical dilemmas from a more coherent and multifaceted perspective instead of responding impulsively based upon a potentially ill-considered intuition or a knee-jerk adherence to the rules.

An excessive emphasis on disciplinary ethics may also have adverse consequences. For example, many psychologists view ethics negatively and thus feel alienated from the ethics code or even from general discussions of ethics. Too often psychologists respond to considerations of ethics with dread and avoidance, instead of with curiosity and enthusiasm for professional development. Furthermore, an excessive focus on the disciplinary sanctions may fail to highlight the relationship between the enforceable standards of the Ethics Code and one's personal values. Consequently, some psychologists may view the Ethics Code as something imposed on them that must be obeyed rather than a document that reflects their deepest beliefs and aspirations.

## **Current and Future Directions in Research and Applications**

The major thrust of positive ethics is to review all aspects of professional and scientific psychology from an overarching ethical perspective. Thus, positive ethics is employed any time a commentator looks at the behavior of psychologists from a deeply held overarching ethical perspective. For example, a positive perspective was used when Fisher urged psychologists to consider foundational ethical principles when conducting research. Brown applied a positive approach when she looked at forensic consultation from the standpoint of an overarching feminist theory. Bennett, Bricklin, Harris, Knapp, VandeCreek, and Younggren went beyond the narrow perspective of ethics seen only as a list of laws and punishment when they urged patient-oriented and ethically-based risk management principles. Positive ethics influenced Knapp and VandeCreek's recommendation that psychologists consider civic virtue and community responsibility as one aspect of their moral obligations.

Positive ethics has implications for the training of psychologists. Handelsman, Gottlieb and Knapp argued that psychology trainees undergo an experience akin to acculturation as they learn the ethical standards that are embedded in the culture of psychology. The acculturation model serves as a foundation for developing positive ethics because it helps students to integrate personal values and ideals into their professional behavior and identity.

The documents developed by the Association of Psychology Postdoctoral and Internship Centers Competency Conference also have relevance to positive ethics. The work group on the ethics competency area defined the ethical competencies of psychologists as going beyond just learning disciplinary codes to include, for example, teaching students about themselves as moral individuals. The work group on professional development overlapped considerably with positive ethics in that it urged programs to teach students about self-care, self-understanding, responsibility, accountability, and other personal qualities with ethical valence that help psychologists reach their highest potential.

A final thrust of positive ethics is on learning more about what motivates and reinforces ethical conduct. Cognitive and psychological sciences are uncovering the mechanisms by which humans determine concepts of right and wrong, and how they influence subsequent behavior. Although science cannot tell us what our ideals should be, scholars such as Hauser inform positive ethics when they ask: What propels people to moral judgments? How do ethical intuitions vary across cultures? and What social factors influence ethical behavior. Indeed, a positive ethics perspective appears among the writings of many psychologists, including those involved with positive psychology, when they consider some of the same aspects of human existence (such as empathy, compassion, forgiveness, universal virtues, and wisdom) as have been considered by philosophical and religious ethicists. Positive ethics is a development with great potential to help psychologists improve themselves, their work, and their communities.

SEE ALSO: ► Compassion ► Leadership

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## Positive Experiences

Elin B. Strand,<sup>a</sup> John W. Reich,<sup>b</sup> and Alex J. Zautra<sup>b</sup>

<sup>a</sup>*Faculty of Nursing, Oslo University College;* <sup>b</sup>*Department of Psychology, Arizona State University*

The fundamental building blocks of all emotions, positive as well as negative are the person's experiences: his or her interactions with the physical and most of all the social world. Evidence shows that positive experiences are directly related to positive emotions, they occur frequently in our daily lives, they help buffer the effects of negative events and emotions, and they are intimately connected to the sense of personal control and mastery in our daily living. Positive experiences are a mainspring of the good life, and research shows that when people increase the number of such events, they will report better well-being.

Studying positive experiences is centrally related to the positive psychology movement. This movement has created new vistas for scientists and practitioners who are focused on understanding and improving human well-being. It provides a platform for integrating newly developing knowledge of the positive aspects of well-being with what is already known about stressful and maladaptive aspects of adaptation.

Positive experiences are most clearly identified as positive events which occur to people in the course of their daily lives. The study of events began with the classic study of Holmes and Rahe who developed a survey instrument to assess the frequency of occurrence of major life changes: large, such as marriage and divorce, and a few small events like vacations. Their work focused on classifying the major stresses, working from the premise that important experiences were the ones most likely to be disruptive. They weighed the experiences based on estimates of the degree of readjustment to everyday life that the events would require for the person to regain equilibrium.

There were two problems with this approach to life experiences. First, the focus was on major events, ignoring the vast set of experiences that define the quality

of a person's everyday life. This shortcoming was corrected with inventories designed to study hassles and other small events. These events are much more frequent, they are constantly present, requiring coping and resolution, and our lives take on different levels of adjustment or maladjustment depending on how well we deal with them. The second problem with the original focus on major calamities in the study of life experience was the focus on the stressful and otherwise disruptive aspects, ignoring the enriching aspects of positive or favorable life experiences altogether. Early on, Zautra and colleagues recognized this shortcoming and in a series of studies introduced methods of registering positive experiences as a central feature in understanding the quality of life. One of the most significant contributions of this line of research has been the discovery of the distinctive nature of positive events compared with negative events. Dealing with a negative event is obviously very different from dealing with a positive one. Personal successes have a major impact on our well-being; they are frequent, pervasive, and motivating. People strive to have more positive events in their lives, and they strive to avoid the negative ones. Research is now showing that both classes of events have to be considered in an integrative, comprehensive positive psychology.

Several distinctive areas of theory and research have become joined in the positive psychology framework. One important tradition within positive psychology is the research by Csikszentmihalyi and colleagues. Based on their work on positive and optimal experiences they have developed what is called the Flow theory. *Flow* is a concept that refers to a state of optimal experience with total absorption in the task at hand. Flow enhances positive feelings when the person's experience becomes so concentrated that other concerns are eliminated, and attention is focused on the event and the positive feelings that result from such complete focus. It is a powerful characteristic of a good life. An experience may be understood as any of the contents of consciousness such as thoughts, feelings and sensations. Flow theory also makes a distinction between external coordinates, such as one's location and activities, and internal coordinates, for example, concentration, happiness and attention of experiences.

A second development by Diener and colleagues has focused on the measurement of well-being. They have investigated what is called *subjective well-being* (SWB) measurement, defined broadly as peoples' cognitive and affective evaluation of their lives. Their assessments of SWB have even extended to cross-national comparisons of levels of SWB in various countries. Their research has shown that events involved in, for instance, positive social relationships and economic status are central to SWB. In overview, it is a hallmark of these research areas to emphasize the dynamics between the person and their environment. Environmental events and the person's cognitive and emotional reactions to them are central components of an integrative model of health and well-being.

Over the years different design and assessment methods have been developed and employed in studies of peoples' experiences and well-being. Often longitudinal approaches of the same population with one year or more between the measurement

points were applied. This is appropriate for studying groups in society but not in the study of individuals. Recent research has used more rigorous study designs and methods such as repeated measures with either weekly or daily and even within-day assessments. Such methods give the opportunity to study both stability and change in a person's everyday experiences. Further, more frequent reports give the opportunity to study life as it goes on and thus, a more detailed and complete picture may be achieved.

## The Effects of Positive Experiences

In one experimental study carried through by Csikszentmihayi and colleagues, the study participants were instructed to live their lives as usual except for having fun, playing or doing anything that was nonfunctional. Even small pleasures such as watching a sunset or smiling to a neighbor should be avoided. Headache, fatigue, distress or being less creative were some of the unpleasant responses that were more frequently reported by many of the participants during the registration period. Thus, a continuous diet of even small daily positive experiences seems to be necessary for sustaining well-being.

An early comprehensive review of the research literature on positive events by Reich and Zautra revealed that desirable events were experienced two to three times more commonly than negative events. Further, people appear to feel good most of the time, and on a daily basis, positive emotions (deriving from positive experiences) greatly outweigh negative emotions. As might be expected, high frequencies of positive experiences are related to higher positive emotions such as happiness and contentment, but they are not generally related to *lower* negative emotions. Negative events have been shown to be related to negative emotions such as anxiety or depression and also tend to suppress our positive feelings. There is an asymmetry in our emotional lives, and this asymmetry is to some extent related to the kinds of experiences people have in daily living. In general, our emotional lives are compounded out of two relatively distinct and, in fact, uncorrelated emotion systems, positive and negative. Thus, people should not generally expect to remove feelings of distress, unhappiness, or depression by taking action to increase their positive experiences. On the other hand, "buffering effects" have been found, in which positive experiences do in fact reduce the impact that negative experiences have on our emotional lives. In this context, it is particularly significant that, in a study by Reich and Zautra, research participants were given experimental instructions to engage in either none, a few, or up to a dozen positive experiences in a two-week period, along with return to the laboratory to report how they had been feeling. Those participants who reported having experienced a large number of stressful (negative) events reported *less* psychological distress if they also had engaged in a high number of positive experiences. Buffering effects of positive experiences are possible under high stress, and a valuable finding for developing event-based therapeutic interventions.



## **The Benefits of Positive Emotional Experiences**

Positive emotions reflect pleasurable engagement with the environment, for example, excitement, joy, interest, love, enthusiasm and contentment. Positive events are what create positive emotional states and feelings. They are connected to greater odds of survival and of living long enough to reproduce and strongly connected to innate and underlying systems of motivational, physiological, and cognitive processes. They facilitate approach behaviors that enhance initiative and activity and promote an individual's engagement and connection with the environment. Our repertoire of positive emotions deriving from positive experiences is wide ranging and highly differentiated. For example, interest creates an urge to explore, and joy creates an urge to play, push limits and be creative in social, intellectual as well as artistic contexts. More specific research suggests that positive experiences are related to cognitive strategies for reframing a situation to see it in a more positive light, such as optimism, hope, and finding meaning. Further, positive emotions broaden a person's mindset, such as expanding the capacity to organize ideas in multiple ways and they enhance cognitive elaboration and creative problem solving.

Based on this research and her own investigations Barbara Fredrickson has developed the broaden-and-build theory of positive emotions. The theory posits that positive emotions increase well-being not only in the moment by triggering upward spirals of cognitions and actions but also by, over time, building physiological, intellectual, psychological and social resources. This broadening and building improves our capacity to cope with the many different adversities we experience in the course of our daily living.

## **Positive Emotional Experiences as Sources of Resilience**

The ability to bounce back from negative emotional experiences and show a flexible adaptation to changing demands of stressful experiences is conceptualized as *resilience*. Resilience is important for sustaining health and well-being. Research is showing that high-resilience individuals tend to report more positive experiences when under stress, and those having more positive emotions on average also have greater capacity to recover from aversive states.

In research on patients with different chronic pain conditions, positive emotions as source of resilience with chronic pain have been the subject of investigation. Whether pain is associated with an identifiable cause or not, it may be a highly stressful experience and a burden to the patient's well-being. Pain can be an extremely aversive bodily experience and a potential stressor because of its uncontrollable fluctuations. Research has shown that subjective experiences of pain vary between individuals and across situations in intensity, duration, and unpleasantness, and that negative emotions are significantly associated with and influence the pain

experience in more destructive ways. Thus, identifying factors that may diminish and prevent negative feelings of pain may be of considerable value to patients' emotional well-being. In that research, participants were asked to give either daily or weekly reports of their pain as well as to what degree they had experienced positive and negative emotions during different periods of assessment. Results from the analyses confirmed that higher levels of pain increased negative emotions and stress. Moreover, in the days and weeks when the participants were able to mobilize positive experiences, even when pain was at its most intense, their levels of stress and negative emotions were significantly lower. Overall, then, research has shown that increased positive affect seems to protect against negative emotions. Thus, positive emotional experiences may be understood as sources of resilience.

## Events and Personal Causation

One may wonder why positive experiences have such favorable effects on our well-being. It is not only their greater frequency or their connection to the above-mentioned benefits of positive emotions, but also other properties have been shown to be directly linked to adjustment and well-being.

Cognitive factors are useful in understanding the impact of positive experiences on health and well-being. A broad range of explanatory style theories have focused on cognitive factors such as the way people explain and judge the cause of an event. Peterson and Seligman have in their attribution theory specified distinct differences between event causation as internal or external and controllable or uncontrollable. Also the reformulated learned helplessness theory posits that the explanations for the cause of an event may vary, that it is of importance and makes a difference to well-being. For example optimistic explanations for negative events are those that are more external, unstable, and specifically related to one single event. In turn, optimistic explanations of positive events are internal, stable, and global while pessimistic explanations for such events are external, unstable, and specific. According to this theory stability relates to duration of helplessness symptoms, globality to generalization of helplessness across events, while the internal causation of the event is associated to deficits in self-esteem in depression. Optimistic and pessimistic explanations in turn will lead to different expectations about future events. Those attributing positive events to internal and stable causes may expect to be in control of such events in the future and thus more resilient.

Numerous studies have shown that a sense of personal (internal) control and mastery in dealing with life's challenges is related to higher levels of mental health. For example, positive events have been shown to be perceived by the person as more under their own personal control, and for desirable events (but not negative events), the perception of being in personal control is related to improved psychological well-being. Furthermore, events are often judged as being positive when people feel that they themselves caused them to occur. When people judge events as self-caused rather than externally-caused, they tend to rate those events

as more positive. This apparent bidirectionality may be a major reason why engagement in positive experiences has been shown to broaden and build a person's thought repertoires.

## **Control and Causation in Positive Experiences**

These principles were put to a rigorous assessment in a recent study by Strand, Reich and Zautra. A large sample of adult medical patients as well as healthy participants reported on the frequencies of positive and negative small daily events – including interpersonal events – which they had experienced in the previous week, along with measures of emotional well-being assessed by positive and negative emotions. The events list on which the patients responded contained subsets of daily events which had been independently scored on the underlying dimension of internal personal causation vs. external causation (for example, “played a sport, game, or cards with friends vs. received a compliment from friend/acquaintance”). Analysis of these reports indicated, as predicted, that experiencing a greater number of personally caused positive events was related to higher levels of positive emotions during the same time period. Interestingly, though, and of great significance for the understanding of mental health and positive experiences, the reporting of having experienced a higher number of externally-caused positive experiences, although correlated with positive emotions, was *also* correlated with higher negative emotions. The fact that the positive events which were externally caused were correlated with negative aspects of adjustment shows the power that personal causation, or in this case a lack of it, plays in the overall structure of our mental health. The results also were congruent with an earlier finding of Brickman, Coates, and Janoff-Bulman that a sample of lottery winners reported no greater happiness than lottery nonwinners. The negative outcomes of positive events may also be because even if the events are positive, they are external and uncontrollable and thus hard to interpret as self-caused. According to both the attribution theory approach and the reformulated learned helplessness theory, this may be related to a pessimistic explanation style associated to negative emotional states and reduced well-being such as depression.

In addition to providing a greater sense of personal control, positive experiences are a magnet that draws people together and the glue that holds them in close connection with one another. This connection provides the nourishment of the positive and is central to the sustainability of the good life. Most positive experiences arise out of interpersonal relations, and there is evidence that sharing the positive amplifies and extends positive emotion benefits. Indeed, most meaningful relationships are defined by a rich history of shared positive and negative life experiences, and happy versus troubled relations may be defined in part by a favorable ratio of positive to negative experiences.

In overview, evidence is accumulating that positive experiences play a major role in positive feelings about life. At this point, the data appear to suggest that

positive experiences have their effects through their intimate connection with personal mastery, control of the life events, the creation of the kind of life that will allow full growth, emotional well-being, and close, caring relationships. Positive experiences are amenable to manipulation by researchers, therapists and trainers who can encourage their research participants to engage in their own self-chosen positive events. The favorable results of that study should be seen in light of contemporary positive psychology. Improved living is one of the promises of the positive psychology movement, and personal causation and helping people increase the quality of their lives is at least one key to this promise.

SEE ALSO: ► Attributional theory ► Broaden and build theory of positive emotions ► Csikszentmihalyi, Mihaly ► Diener, Ed. ► Flow

## Positive Illusions

Shelley E. Taylor

*University of California, Los Angeles*

Many people hold beliefs about themselves, the world, and the future that are more positive than reality can sustain. These beliefs have been called *positive illusions*. At least three types of positive illusions have been documented. The first is self-aggrandizing self-perceptions. People consistently regard themselves more positively and less negatively than they regard others and than others regard them. The second illusion concerns perceptions of mastery or control. Most people believe that they can exert more personal control over environmental circumstances than is actually the case. Indeed, considerable research shows that people believe they can even affect outcomes that are heavily due to chance. A third positive illusion concerns unrealistic optimism. Most people are optimistic and believe that the present is better than the past and that the future will be better as well, especially for themselves. For example, when asked what they think is possible for themselves in the future, college students report more than four times as many positive as negative possibilities. Typically, people overestimate the likelihood that they will experience a wide variety of pleasant events, such as liking their first job or having a gifted child, and somewhat underestimate their risk of succumbing to negative events, include being fired, getting divorced, or succumbing to a chronic disease.

These positive beliefs are highly prevalent in normal thought and might seem amusing or perhaps troubling, were it not for the fact that they are reliably associated with psychological well-being. Mental health experts generally define the well-adjusted person as possessing particular qualities: the ability to be happy or contented; the ability to care for and about others; the capacity for creative and productive work; and the ability to meet stressful events with relative equanimity, learning or growing from them when possible. Extensive research now suggests that positive illusions are associated with these outcomes.

The positive illusions of self-aggrandizing self-perceptions, an illusion of control, and unrealistic optimism may be particularly helpful for enabling people to combat major stressful events or traumas. These disruptive negative events at least temporarily produce aberrations in psychological functioning, marked by anxiety, depression and other negative emotional states, and may also enhance risks for health-related disorders. Research suggests that people who are able to develop or maintain their positive beliefs in the face of these traumas or potential setbacks, even when illusory, cope more successfully with them and show less evidence of psychological distress.

Research with a broad array of patient groups including heart patients, cancer patients, and people living with AIDS reveal that the majority of people in these circumstances react to their conditions by developing perceptions of themselves as physically better off than others with their condition, as coping more successfully than other patients like themselves, and as having experienced beneficial outcomes in their lives. The themes around which such adaptations occur include a search for meaning in the experience, an effort to regain a sense of mastery, and an attempt to restore a positive sense of self. Many people report that the stressful event revealed or evoked personal qualities that were either previously latent or nonexistent, such as an increased understanding of others and an enhanced sense of meaning in life. These findings suggest that when people experience personal tragedies or setbacks, they respond with cognitively adaptive efforts that may enable them to return to or exceed their previous level of psychological functioning. Not all of the beliefs that people develop in the wake of life threatening experiences are illusory, of course, but the illusory component of these adaptive beliefs is highly prevalent.

## **Potential Risks of Positive Illusions**

There are several potential risks that may arise if people hold positive illusions about their personal qualities and likely outcomes. The first is that they set themselves up for unpleasant surprises for which they are ill prepared when their overly optimistic beliefs are disconfirmed. Research suggests that for the most part, these adverse outcomes do not occur. People's beliefs are more realistic at times when realism serves them particularly well, for example, when initially making plans, when accountability is likely, or following negative feedback from the environment. Following a setback or failure, people's overly positive beliefs may be attached to a new undertaking.

A second risk is that people who hold positive illusions will set goals or undertake courses of actions that are likely to produce failure. This concern appears to be largely without basis. Research shows that when people are deliberating future courses of actions for themselves, such as whether to take a particular job or go to graduate school, their perceptions are fairly realistic, but they become overly optimistic when they turn to implementing their plans. The shift from realism

to optimism may provide the fuel needed to bring potentially difficult tasks to fruition.

A third risk is that positive self-perceptions may have social costs. Considerable research suggests that people who are self-promoting in public situations do indeed turn other people off. Initially their upbeat optimistic nature endears them to others, but over time, other people become aware of their self-absorption and turn away from them. People who hold overly positive self-assessments privately, however, do not turn others off and indeed the opposite is the case. They make positive impressions on others, they are well liked by their friends, and they impress clinicians and peers as mentally healthy.

A potential limitation of positive illusions concerns their cultural prevalence. Although it is easy to document positive illusions in Western cultures, people in East Asian cultures are much less likely to self-enhance and indeed, are often self-effacing instead. Positive illusions may be manifest in group-enhancing biases and may also be privately held, but not publicly voiced. Nonetheless cultural differences in manifestations of and prevalence of positive illusions remains an important issue.

## Positive Illusions and Physical Health

The ability to develop and sustain positive perceptions in the face of setbacks has health benefits. In a series of studies with men who were HIV seropositive or already diagnosed with AIDS, Reed, Kemeny, Bower, Taylor and their colleagues found that those who held unrealistically positive assessments of their abilities to control their health conditions experience a longer time to developing symptoms and a slower course of illness. In addition, men who were able to find meaning in their experiences were less likely to experience HIV progression that might result from stressful events such as bereavement.

Some of the health benefits of positive illusions may result from several known predictors of health: the ability to attract social support, protection against psychological distress including depression (which has been tied to risk of illness and/or a more rapid course), or better health behaviors. However, evidence supports a more direct biological pathway. Specifically, people who hold overly positive beliefs about themselves, the world, and the future, show somewhat less reactivity to stress. These findings suggest that positive illusions may be health-protective by means of keeping wear and tear on stress systems at low levels. As such, the cumulative damage that might otherwise occur to biological systems as a result of stress exposure may be lessened.

## Origins of Positive Illusions

Where do positive illusions come from? Research suggests that there may be genetic origins of positive illusions, although the amount of variance accounted for by

genetic factors is relatively modest, perhaps 25–30%. Early environment also plays an important role, such that people are more able to develop positive beliefs and psychosocial resources more generally in nurturant environments than in more harsh ones. Gene-environment interactions may also play a role.

## Summary

Positive illusions are overly positive beliefs about the self, the world, and the future that are protective of mental and physical health. Increasingly, scientists are deepening their understanding of the emotional, neural, genetic, and neuroendocrine bases of these beneficial effects. Whether positive illusions can be learned or not remains an open question. There is no reason to think that they cannot be taught and indeed, many well-established therapies that involve teaching people to think better of themselves, their circumstances, and their outcomes may rely, at least in part, on instilling a somewhat illusory positive glow about oneself in the world.

SEE ALSO: ► Cognitive appraisal ► Taylor, Shelley

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## Positive Law and Policy

Peter H. Huang<sup>a</sup> and Jeremy A. Blumenthal<sup>b</sup>

<sup>a</sup>*Temple University*; <sup>b</sup>*Syracuse University*

Gross national product does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, or the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our teaching; it measures everything, in short, except that which makes life worthwhile. (Robert F. Kennedy, Speech at the University of Kansas, March 18, 1968 [Kennedy, 1968/1993])

Positive law and policy applies insights from positive psychology to design legal rules and public programs that foster a good life. Data measuring people's happiness can inform policy evaluation in diverse arenas. Jury participation and

direct participatory democracy improve life satisfaction. Positive psychology has novel implications for paternalism.

Positive law and policy applies insights from positive psychology to design legal rules and institutional policy. Happiness-based measures offer nonmonetary metrics for evaluating policy in financial and securities regulation (Huang, 2005). It would be helpful to policy-makers to quantitatively assess how financial policies impact not only people's happiness, but also investors' confidence and moods. Both investor confidence or trust in financial markets and investors' moods, such as financial anxiety or investment stress, affect and are affected by financial variables, such as consumer debt, consumer spending, consumer wealth, corporate investment, initial public offerings, and securities market demand, liquidity, prices, supply, and volume. Financial and securities regulators can and should consider the emotional impacts that alternative regulations have upon both people's emotions themselves and real consequences of changes in people's emotions on aggregate economic and financial variables. There is evidence that people in many countries have experienced increased wealth over time but not increased self-reported happiness over time. Such evidence suggests that designing financial policies to merely increase people's wealth over time may not lead to people increasing their well-being. Such evidence also supports proposals that policy makers should analyze how financial policies affect measures of people's happiness.

Affective reactions are likely to be just as important, if not more important, for nonfinancial risks, such as environmental, health, and safety risks, than financial risks. But while money provides a common metric for quantifying and measuring financial risks, nonfinancial risks typically lack a universally accepted standardized and unifying metric. Money arises naturally in discussions evaluating regulating financial and securities markets, but not necessarily in discourse analyzing regulating nonfinancial risks. Measures of subjective well-being and happiness can lend insight into nonfinancial contexts as diverse as development economics, environmental protection, macroeconomics, and taxation. In particular, Nobel-prize winning psychologist Daniel Kahneman and coauthors have developed several empirical means of measuring happiness, both at the individual and national levels. For example, Kahneman and economist Alan B. Krueger propose the U-index to measure the fraction of time people spend in an unpleasant emotional state. Instead of designing public policy to achieve higher subjective well-being, there could be greater emotional appeal to and political support for designing public policy to minimize subjective ill-being. For instance, U-index data can identify laws and policies that can improve people's happiness by changes in their allocation of time over such activities as childcare, commuting, and work versus leisure.

Civic participation at various levels can also lead to a flourishing life. Citizens who serve on juries are typically well-satisfied with their experience, satisfaction that may stem from their ability to participate in the mini-democracy of jury deliberation. That is, jurors might be "motivated by a feeling of satisfaction with participation in the democratic process" (Prescott & Starr, 2006, p. 339). Similarly,



participating in a democratic political culture, or simply having the chance to do so, can lead to increased happiness. Regardless of political outcome, such participation evidently provides citizens “a feeling of being involved and having political influence, as well as a notion of inclusion, identity and self-determination” (Frey, Benz, & Stutzer, 2004, p. 380).

Government intervention may help enable individuals and communities to thrive. Such a positive approach to law and policy would assist individuals and societies to elevate their well-being from existing baseline levels – rather than the traditional paternalism which limits choices and opportunities. Public policy to promote *beneficial* outcomes might be more politically feasible than remedial policies. An example is government response to problems of poor physical health, including obesity or coronary heart disease. The conventional sort of paternalistic intervention – a “remedial” approach – might remove people’s options to buy and eat fatty and other unhealthy foods by prohibiting their sale in restaurants, cafeterias, or even supermarkets. A positive paternalistic approach, in contrast, such as government mandating an exercise program – perhaps even just for those at risk for heart disease – might be seen as less intrusive than the remedial approach, and may achieve the same objectives. Public health experts suggest that reducing youth obesity and other health problems can occur by requiring minimum physical activity levels in schools, with potential accountability for schools failing to provide appropriate physical education programs. Far more speculative and controversial might be for governments to encourage or even mandate such physical exercise programs not for the potential *health* benefits, but for the positive *mood* effects that exercise brings about, in order to reap the benefits of being in a positive mood (Blumenthal, in press). Employer-sponsored, or mandated, meditation programs might also serve such a goal. Clearly, both the acceptability of such interventions by either government or private parties is a matter for further empirical research, as is, of course, such programs’ effectiveness.

Environments in which it is challenging for people to learn to want what they like, such as those involving viscerally addictive experiences or substances, decisions having irreversible or very costly to reverse consequences, and infrequently repeated situations, might justify some type of policy intervention. Examples include possible choices about career, children, death, family, health, living wills, marriage, and retirement. Positive paternalism can also encourage people to engage in practicing interventions and strategies that lead to sustainable increases of well-being. Government sponsoring, subsidizing, or even mandating that curricula in elementary schools and high schools include education about positive psychology are other possible policy alternatives to foster increases of well-being among youth. Whether such positive educational policy interventions can and will be successful at increasing and sustaining happiness are currently open empirical questions about which there will be more forthcoming data.

SEE ALSO: ► Flourishing ► Civic responsibilities and virtues

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## Positive Organizational Behavior

Carolyn M. Youssef<sup>a</sup> and Fred Luthans<sup>b</sup>

<sup>a</sup>*Bellevue University*; <sup>b</sup>*University of Nebraska, Lincoln*

Drawing from the theory-building, research and applications associated with the Gallup Leadership Institute at the University of Nebraska, Lincoln (see [www.gli.unl.edu](http://www.gli.unl.edu) for further information and updates), *positive organizational behavior* (POB) has been defined as: “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (Luthans, 2002b, p. 59). Although positivity in the workplace has a long history, similar to the emergence of positive psychology, applied to the workplace, POB represents a recent focus on positive psychological resource capacities meeting the inclusion criteria of being theory- and research-based, having valid and reliable measures, exhibiting state-like and thus developmental characteristics that can be enhanced through relatively brief interventions, and yielding an impact on work-related performance.

## Positive Psychological Resource Capacities

Examples of resource capacities meeting the POB inclusion criteria include self-efficacy, hope, optimism, and resiliency. *Self-efficacy* can be defined as: “one’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998, p. 66). *Hope* is defined as: “a positive motivational state that is based on an interactively derived sense of successful 1) agency (goal-directed energy) and 2) pathways (planning to meet goals)”

(Snyder, Irving, & Anderson, 1991, p. 287). Based on Martin Seligman's research, *optimism* refers to an explanatory style that attributes positive events to personal, permanent and pervasive causes, and negative events to external, temporary and situation-specific ones. In contrast, pessimism explains positive events through external, temporary and situation-specific attributions, and negative events through internal, permanent and pervasive ones. Resiliency is "the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility" (Luthans, 2002a, p. 702).

## **From Positive Organizational Behavior to Psychological Capital**

A further development of POB is *psychological capital* (PsyCap), which has been defined as:

An individual's positive psychological state of development that is characterized by: 1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; 2) making a positive attribution (optimism) about succeeding now and in the future; 3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and 4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success. (Luthans, Youssef, & Avolio, 2007, p. 3)

Luthans and Youssef explain that PsyCap goes beyond the traditionally recognized financial capital (what you have), human capital (what you know), and even social capital (who you know). According to Avolio and Luthans, PsyCap synergistically adds to the equation one's actual self (who you are today), and developing that self into what one can become in the future (the possible self). Luthans, Avolio, Avey and Norman have recently conceptualized and shown beginning empirical support for PsyCap as a multidimensional, latent core construct, to which self-efficacy, hope, optimism and resiliency synergistically contribute. In addition, Luthans, Avey, Avolio, Norman, Combs, and Patera have recently conceptually and empirically demonstrated successful PsyCap development interventions capitalizing on such synergies.

## **Current Status and Emphases of POB and PsyCap Research**

In line with the POB inclusion criteria, to date, there are valid and reliable measures for self-efficacy, hope, optimism, and resiliency, some of which are specific to the workplace. Moreover, a comprehensive PsyCap measure has also been recently developed and tested by Luthans, Avolio, Avey and Norman, published

in *Personnel Psychology*. The external validity of PsyCap is being conceptually and empirically supported through several cross-sectional and cross-cultural applications. Just recently, a comprehensive review of the positive organizational behavior literature to date by Luthans and Youssef has been published in the *Journal of Management*.

Another development in this positivity in the workplace domain of study is *authentic leadership development* (ALD). ALD has been defined as:

The process that draws upon a leader's life course, psychological capital, moral perspective, and a highly developed supporting organizational climate to produce greater self-awareness and self-regulated positive behaviors, which in turn foster continuous, positive self-development resulting in veritable, sustained performance. (Avolio & Luthans, 2006, p. 2)

In other words, the leader's values, past experiences and PsyCap, along with a positive organizational climate, can accelerate and sustain the ALD process. An accelerated ALD process can then trickle down to the leader's followers, enhancing their performance, positive attitudes and development.

## Challenges and Future Directions

Several challenges and opportunities clearly face POB researchers and attempts at effective application. Some on these issues pertain to positivity in general. For example, critics of positivity research doubt the assumption of human benevolence often underlying many of the current positive approaches, making it necessary to examine critical interactions between personal, organizational and other situational factors that may be conducive or restrictive to the applicability of positivity.

Moreover, positivity (and negativity) may vary across cultures and other contexts; this necessitates careful examination of the boundaries of various virtues and positive capacities. In addition, many skeptics have rightfully questioned if and when overemphasis on positivity can result in "too much of a good thing." Such contingencies and limitations may lead to interesting relationships and interactions that should be examined using newly developing theoretical frameworks and research methodologies in order to better capture the contribution of positivity to today's and tomorrow's workplace.

Another critical challenge and relevant area for future research is the need for a clear demarcation and objective criteria for distinguishing what constitutes developmental states, versus dispositional traits. Recent conceptual theory-building, as well as beginning empirical research, have been addressing this critical issue, and it is likely that more will take place in the near future. In the context of POB, Luthans and colleagues have conceptualized states and traits to exist along a continuum. On one end of that continuum are highly stable traits that are believed to be hardwired at a very early age, or even genetically determined, such as one's

intelligence and various areas of talent. On the opposite end of the continuum are highly transient states that exhibit very little stability over time and that are subject to change in reaction to momentary situational variables, such as one's mood.

On the other hand, uncertainty often occurs in relation to variables that are not at the extreme ends of the continuum, but rather those referred to as *trait-like* or *state-like*. Although not entirely fixed or hard-wired, trait-like variables are characterized by relative stability over time and applicability across situations. They result in general cognitive, affective, and behavioral tendencies, and are empirically supported by high test-retest correlations. Examples include the Big Five personality traits such as conscientiousness and emotional stability, as well as core self-evaluation traits such as self-esteem and locus of control.

Although state-like variables are not as transitory or short-lived as "pure" states, they are still relatively malleable and open for development and change using relatively brief and practical interventions, thus meeting the POB inclusion criteria, and offering particular relevance to today's fast-paced workplace. One rule of thumb recently suggested by Wright for researchers to consider is to use stability over six months as an operationalization of the temporal demarcation between traits and states. As discussed earlier, examples of state-like capacities include self-efficacy, hope, optimism, and resiliency. However, many other positive psychological resource capacities represent high-potential variables for inclusion in POB and PsyCap research. Luthans, Youssef and Avolio suggest that future research may address potential PsyCap resource capacities such as courage, forgiveness, gratitude, spirituality, creativity, wisdom, well-being, flow, humor, and emotional intelligence for their possible development and performance impact in the workplace.

Finally, POB and PsyCap research will likely benefit from examining various levels of analysis: the individual (micro) level currently emphasized by POB as defined here, as well as the dyad (e.g., leader-follower relations), group (e.g., team, department or business unit), organizational, and even societal levels. Such macro perspectives have been recently addressed by the parallel *positive organizational scholarship* (POS) movement at the University of Michigan (see <http://www.bus.umich.edu/positive> for further information and updates). POS is defined as:

the study of that which is positive, flourishing, and life-giving in organizations. Positive refers to the elevating processes and outcomes in organizations. Organizational refers to the interpersonal and structural dynamics activated in and through organizations, specifically taking into account the context in which positive phenomena occur. Scholarship refers to the scientific, theoretically derived, and rigorous investigation of that which is positive in organizational settings. (Cameron & Caza, 2004, p. 731)

Similar to this POS emphasis is the understanding of the social embeddedness of POB and PsyCap in the upward spirals and contagion effects within and across organizational units and participants. In conclusion, positive organizational behavior as summarized here may contribute to competitive advantage through people in present and future organizations.

SEE ALSO: ► Organizational psychology ► Positive organizational scholarship ► Resiliency ► Self-efficacy

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## Positive Organizational Scholarship

Jane E. Dutton and Scott Sonenshein  
University of Michigan

### Introduction

Positive organizational scholarship (POS) and positive psychology are focused on understanding the conditions and processes that explain flourishing. What differentiates POS is an explicit interest in understanding and explaining flourishing in organizational contexts (including individuals, groups, units and whole organizations). *Flourishing* refers to being in an optimal range of human functioning and as Fredrickson and Losada have suggested, flourishing is indicated at the individual level by goodness, generativity, growth and resilience. At the collective level of groups and organizations, flourishing may be indicated by creativity, innovation, growth, resilience, thriving, virtuousness or other markers that a collective is healthy and is performing in an “above normal” or positively deviant range. POS also focuses on the development of individual, group and collective strengths that represent forms of individual and collective excellence.

POS unites existing domains of organizational inquiry focused on flourishing. This includes work on flourishing indicators such as creativity, engagement, flow,

growth, health and well-being, as well as contributors to flourishing that consider features of the organization, group and job contexts. POS opens up new topics of study, such as compassion, courage, energy and energy networks, forgiveness, resilience, thriving, and work callings – just to name a few. POS scholarship includes a growing body of theoretical work and an emerging set of empirical studies (for examples, see publications in mainstream organizational journals).

In this brief review of POS, we will trade depth for breadth to provide the reader with a basic understanding of POS as both a domain and lens.

## **The Topic's Intellectual and Social Context**

Many intellectual disciplines have influenced the development of POS including appreciative inquiry and community psychology. POS also reinvigorates ideas from humanistic psychology that were foundations for the field of organizational studies. The first POS conference was in 2001 and it generated the first edited book devoted to POS by Cameron, Dutton and Quinn in 2003. However, the most widespread influence comes from positive psychology. Both POS and positive psychology urge scholars to focus not only on improvements from “negative” states (such as illness or corrosive relationships) to normal states (such as mental health and helpful relationships), but also from normal states to extraordinary ones (such as thriving and life-giving relationships). This shift in explanatory focus from negative→normal towards normal→positive reflects a common concern that current theories are limited by a focus on explaining how individuals, groups and organizations move from below normal to normal states, which may be very different from explaining how individuals, groups and organizations move from normal to above normal, or positively deviant states. From a POS perspective, negative states may be important for explaining flourishing or the cultivation of strengths. For example, work on resilience shows that negative setbacks are critical. But POS scholars emphasize the building of strengths in the recovery from setbacks. POS is not synonymous with only positive phenomena but rather treats them as figure, and not ground.

Several research streams with a more positive focus have developed within organizational studies. Positive organizational behavior (POB) focuses on understanding how to develop a particular set of psychological states (confidence, hope, optimism and resiliency) in individuals. Models of healthy work and healthy work practices also inform the positive organizational scholarship agenda. A focus on positive organizational relationships at work emphasizes the forms, functions, consequences and enablers of relationships between people at work that are mutually beneficial. Researchers have called for a more positive approach to leadership and group research, and other organizational researchers have integrated business ethics and POS research, either through a strengths-building approach to understanding business ethics and corporate responsibility or focusing on how ethics as a field provides important philosophical foundations for POS. Finally, some have called

to revise the work-family literature with a focus on explaining conditions where individuals are flourishing in both life domains as opposed to emphasizing trade-offs between the two.

While positive psychology originally sought to understand “positive institutions,” POS provides the thought leadership in this domain. To date, POS scholars tend to focus on the situations and states of individuals and groups in work organizations. POS shares many assumptions and goals with positive psychology, but brings a unique focus on processes, states and behaviors in and between organizational contexts. This necessitates the use of multiple levels of analysis and a greater social processes focus.

## **Major Dimensions of the Topic**

The domain of POS is appreciated from three vantage points: the dependent variables studied, the core mechanisms considered and the core enablers identified. Given the newness of POS, these descriptors mark the beginnings of this field of inquiry.

### **Dependent Variables**

Because of its interest in explaining flourishing at all levels within and of organizations, the range of dependent variables of interest to POS is broad. At the individual level, foci have included: well-being and health, growth, optimism, self-efficacy, happiness and satisfaction, thriving, resilience, integrity, and other markers of optimal human functioning and the building and exercising of individual strengths and virtues in organizations. At the dyadic level, POS focuses on high quality connections that may be manifest in a variety of relationships in organizations e.g., between subordinates and supervisors and among peers. At the group, team or unit level, POS invites inquiry into flourishing as indicated by collective levels of creativity, learning, flow, synergy and resilience. Finally at the organizational level, POS focuses on the development and display of virtues and strengths such as organizational courage, compassion, forgiveness, wisdom, integrity, and virtuousness as well as explaining other forms of organizational flourishing such as collective resilience, collective optimism and collective hope.

### **Explanatory Mechanisms**

Another way of viewing POS is to examine explanatory mechanisms, which emphasize positive dynamics within individuals, groups and organizations. Positive dynamics refer to processes that strengthen or improve the functioning of individuals, groups or organizations. A POS focus directs attention to generative (e.g., life-building, capability-enhancing, capacity-creating) dynamics in organizations. Consider three possible mechanisms.



First, the dynamics of positive emotions are keys to understanding human flourishing in and of organizations. Positive emotions refer to shorter-term states of felt activation of individuals or collectives that are associated with “a pleasantly subjective feel” (Fredrickson, 1998, p. 300). Positive emotions of individuals and of collectives broaden “momentary thought-action repertoires” and the experience “builds enduring personal resources” (Fredrickson, 2003, p. 166). Studies directly and indirectly support this idea when accounting for the effects of positive emotions on creativity, patterns of group interaction in problem-solving tasks and levels of cooperation in negotiation.

Second, the dynamics of positive meanings help to explain how individuals, groups and whole organizations construct and institutionalize meanings that facilitate individual and collective functioning. For example, studies of how individuals craft positive work identities through seeing their work as a calling, through changing the relationships that people have with others on their jobs, or through emphasizing positive distinctiveness of one’s social group memberships illustrate how cultivating positive meaning about the self in organizations can direct people toward more optimal states of functioning. However, positive meaning can also be a collectively shared construction among unit members that fosters flourishing. For example, in a study of compassion organizing by Dutton and colleagues, shared positive meaning around the collective valuing of the whole person and the valuing of expressing one’s humanity were shown to help explain the activation and mobilization of compassion. More generally, shared positive collective meaning can alter the connection between people, provoke positive emotions, and foster interactions that elevate functioning and capability.

A third mechanism that is studied in POS involves positive relationships between people that are marked by mutuality, positive regard, trust and vitality. While called by different names (e.g., positive ties, positive social capital, or high quality connections), a focus on these types of relationships and their functions (e.g., task accomplishment, career development, sensemaking, provision of meaning and personal support), Kahn has unearthed possibilities for explaining different forms of flourishing in and of organizations. For example, Vogus has found in his studies in nursing units find that units marked by higher levels of respectful interaction between members (a form of high-quality connecting) are more attentive to errors, which, is associated with fewer accidents and a better safety record.

### Core Enablers

A final mapping of the POS domains extends the interest from a focus on process to a focus on contextual enablers of different forms of flourishing in and of organizations. Included in this approach is research on how organizational cultures, structures, practices, systems and leadership create conditions in which individuals, teams or units flourish, and consideration of how features of organizations, unit or team contexts create dynamics that contribute to individual and collective flourishing.

## Methodological and Conceptual Challenges

While POS research has progressed, pressing methodological and conceptual concerns remain. Methodologically, POS researchers have often “sampled on the dependent variable,” studying instances where people, units or organizations are flourishing, which may obscure the more intricate dynamics of the full spectrum of variation needed to explain these outcomes. On the other hand, the types of enablers and mechanisms that underlie states and behavior associated with flourishing may differ from those that focus on negative and normal behavior.

A second methodological challenge involves developing valid measures of the new variables being considered – e.g., energy, vitality, high-quality relationships, thriving – and to establish their convergent and discriminant validity. Finally, future work will need to include experimental and field study designs that allow for inferences about underlying causal dynamics and processes, while at the same time, remaining open to the insight and descriptive richness afforded through more qualitative and narrative approaches.

Several conceptual challenges invite consideration. First, POS scholars must account for the role of the “negative” in explaining positive outcomes and positive dynamics within and of organizations. As recent reviews of POS suggest, negative phenomena – such as negative emotions – are often adaptive in human functioning. Yet, as suggested above, POS scholars are attentive to “the negative”; they examine what may be positive about seemingly neutral or negative states.

Second, POS researchers need to clarify the referent groups for determining positive, to address the question, “positive to whom?” For example, research in organizational-citizenship behaviors identifies a set of prosocial behaviors individuals engage in, but some of these prosocial behaviors may compromise organizational functioning. Is something that helps individuals but harms organizations considered positive? Or consider traditional positive phenomenon such as empowerment. Would POS scholars consider such concepts positive if they are used to exploit individuals? Have point critical theorists considered this?

A third challenge is to more comprehensively determine the range of positive and negative enablers that explain human flourishing in and of organizations, and to carefully identify at what level of analysis these enablers and processes are operating. This means carefully attending to what is uniquely organizational about the underlying causes and processes.

Fourth, while some indicators of flourishing and some individual and organizational strengths have been studied, much remains unexplored. For example, Peterson and Seligman have developed a classification of 6 core virtues thought to capture positive human strengths highlighted across a broad range of philosophical and religious traditions. While organizational scholars have considered some of these virtues and strengths (e.g., justice and wisdom) they have paid less attention to emotional strengths such as courage, interpersonal strengths such as

humanity and temperance or transcendence-related strengths. Organizational researchers have opportunities to contribute to understanding how organizational contexts develop and sustain these kinds of positive strengths as well as how these strengths are manifest at collective levels.

SEE ALSO: ► Positive organizational behavior

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## Positive Psychology (History)

P. Alex Linley

*Centre for Applied Positive Psychology*

Positive psychology as we know it today was inaugurated with Martin E. P. Seligman's Presidential Address delivered to the 107th Annual Convention of the American Psychological Association in Boston, Massachusetts, on August 21, 1999. Shifting focus from an established career as an international authority on depression, pessimism, and learned helplessness, Seligman proposed to his audience that psychology had largely neglected the latter two of its three pre-World War II missions: curing mental illness, helping all people to lead more productive and fulfilling lives, and identifying and nurturing high talent. The advent of the Veterans Administration (in 1946) and the National Institute of Mental Health (in 1947) had largely rendered psychology a healing discipline based upon a disease model and illness ideology, and Seligman resolved to use his APA Presidency to initiate a shift in psychology's focus toward a more positive psychology.

## Positive Psychology Meetings, Conferences, and Awards

Seligman's presidential initiative began with a series of meetings in Akumal, Mexico, of mid-career scholars who could inform the conceptualization and early development of positive psychology. The Akumal meetings ran annually from January 1999 (Akumal I) through January 2002 (Akumal IV). The first Positive Psychology Summit was held in September 1999 in Lincoln, Nebraska, followed by two further national Positive Psychology Summits in Washington, DC (October 2000, October 2001), which were then superseded by the First International Positive Psychology Summit

in October 2002. Subsequent International Positive Psychology Summits have since run annually each October.

In addition to the International Positive Psychology Summits in the United States, there have been a number of European positive psychology conferences. The first was the British Psychological Society Student Members Group Conference, themed “Positive Psychology: A new approach for the new millennium,” held in Winchester, England, in April 2000. Subsequently, biennial European conferences have been organized by the European Network for Positive Psychology, including the First European Conference on Positive Psychology in Winchester, England (June 2002); the Second European Conference in Verbania Pallanza, Italy (July 2004); and the Third European Conference in Braga, Portugal (July 2006). The First Applied Positive Psychology Conference was held at the University of Warwick, England (April 2007). Outside the United States and Europe, the first South African Conference on Positive Psychology was held in Potchefstroom (April 2006), the first Asian Conference on Positive Psychology was held in Hong Kong (May 2006), and the First Iberoamerican Conference on Positive Psychology was held in Buenos Aires, Argentina (August 2006).

As well as the research summits, there have been a number of dedicated initiatives to support, build and recognize the research capabilities of early and mid-career positive psychology researchers. The Positive Psychology Summer Institutes were designed to bring together early career researchers and more senior scholars for intense intellectual exchange and interaction. Five Summer Institutes were held: Sea Ranch, California, August 2001; Montchanin, Delaware, August 2002 and August 2003; Lago D’Orta, Italy, July 2004; and Philadelphia, Pennsylvania, June 2005. The prestigious Templeton Positive Psychology Prize, administered by the American Psychological Association, ran for 3 years and offered the largest monetary prize in psychology. The winners of this Prize were Barbara Fredrickson (2000) for her work on positive emotions; Jon Haidt (2001) for his work on the positive moral emotion of elevation; and Suzanne Segerstrom (2002) for her work on the beneficial effects of optimism on physical health. In October 2006, Shelley Taylor was awarded the inaugural Clifton Strengths Prize, which recognized the life work of Donald O. Clifton (1924–2003), and is awarded biennially in acknowledgement of an individual’s enduring influence on the field of strengths psychology.

## Publication and Education Landmarks

Significant publication landmarks in the history of positive psychology include the millennial special issue of the *American Psychologist* on happiness, excellence, and optimal human functioning, edited by Martin E. P. Seligman and Mihaly Csikszentmihalyi; the *Handbook of Positive Psychology*, edited by C. R. Snyder and Shane J. Lopez; Martin E. P. Seligman’s bestselling *Authentic Happiness: Using the New Science of Positive Psychology to Realize your Potential for Lasting Fulfillment*; the first volume to focus on positive psychology applications, *Positive Psychology in Practice*,

edited by Alex Linley and Stephen Joseph; and the supporting manual of the VIA Inventory of Strengths, *Character Strengths and Virtues: A Handbook and Classification*, by Christopher Peterson and Martin E. P. Seligman. The first issue of the *Journal of Positive Psychology* was published by Taylor and Francis in January 2006, with Robert Emmons serving as Editor-in-Chief, the opening article of which included an appendix detailing all journal special issues on positive psychology to October 2005.

The world's first Master of Applied Positive Psychology was launched at the University of Pennsylvania in September 2005, while the first European Masters in Applied Positive Psychology commenced at the University of East London, UK, in February 2007.

## Historical Lineage

Clearly, positive psychology has had a major impact in a relatively short period of time, but it is also eminently clear from a cursory examination of the research literature that positive psychology did not “begin” in 1997, or 1998, or 1999, or 2000. Positive psychology has always been with us, but as a holistic and integrated body of knowledge, it has passed unrecognized and uncelebrated, and one of the major achievements of the positive psychology movement to date has been to consolidate, lift up and celebrate what we *do* know about what makes life worth living, as well as carefully delineating the areas where we need to do more.

Taking a longer historical view of positive psychology, it is important to note that more than fifty years ago, Abraham Maslow lamented psychology's preoccupation with disorder and dysfunction:

The science of psychology has been far more successful on the negative than on the positive side. It has revealed to us much about man's shortcomings, his illness, his sins, but little about his potentialities, his virtues, his achievable aspirations, or his full psychological height. It is as if psychology has voluntarily restricted itself to only half its rightful jurisdiction, and that, the darker, meaner half. (Maslow, 1954, p. 354)

Maslow even talked specifically about a positive psychology, by which he meant a more exclusive focus on people at the extremely positive ends of the distribution, rather than the meaning which is today understood of positive psychology. More broadly, there are strong themes of convergence between the interests of humanistic psychology and modern positive psychology, and one might even trace the study of positive psychological topics back as far as William James and his writings on healthy mindedness. The oldest historical antecedents of positive psychology that have been identified are the writings of Aristotle on virtue and what it means to live a good life.

## Historical Critiques

Initially at least, positive psychology came in for some criticisms about the fact that it did not do enough to acknowledge the rich philosophical and psychological heritage on which ideas about a good life and optimal human functioning might be based. This is perhaps understandable in the early days of a “new” research endeavour, but increasing maturity should be recognized by an increasing acknowledgement of what has gone before and how new work can build on its historical foundations. Similarly, early critiques of the positive psychology movement often centred on positive psychology’s perceived attention only on the positive sides of human experience, leading to a number of rebuttals that sought to demonstrate how positive psychology could actually serve as an integrative force for psychology, rather than a divisive one. Other early critiques of the positive psychology movement were directed at the perceived inability of psychologists and others to assess states such as happiness and traits such as character strengths in any meaningful way, compounded by the view that these were in any event irrelevant epiphenomena. Substantial subsequent research, much of it conducted under the positive psychology umbrella, has now faced down many of these criticisms by demonstrating the reliable and valid measurement of happiness and character strengths, as well as articulating their roles within and importance for optimal human functioning.

## Looking Forward

The study of the history of positive psychology can also inform us about the directions that it may take in the future. The specialization argument, which divorces positive psychology from other areas of psychology, whether described as negative psychology or business-as-usual psychology, versus the integration argument, which sees positive psychology as an integrative force for the study of holistic human experience, are two of the trends that will determine how positive psychology’s future evolves. A second fault line will be whether positive psychology succeeds in reaching out to other branches of psychology and other disciplines more broadly, or whether it becomes a narrowly focused home for people only interested in happiness. If positive psychology is to realize its own potential for optimal scientific functioning and powerful preventative and curative applications, it requires both integrative energy and inclusive policies. Its reach and influence in such a short time indicates the appetite that exists for the ideas and applications of positive psychology, but only time will tell whether it will take the steps toward genuine transformational actions.

SEE ALSO: ► Applied positive psychology ► Aristotle ► Positive psychology  
► Seligman, Martin ► Strengths perspective (positive psychology)

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## Positive Psychology Network

Peter Schulman

*University of Pennsylvania*

The intellectual birth of positive psychology came in 1998 when Dr Martin Seligman was President of the American Psychological Association and made positive psychology one of his presidential initiatives. The organizational and financial birth of positive psychology arrived in 1999, when Seligman raised millions of dollars of funding to carry out numerous initiatives, some of which are described below. The term *Positive Psychology Network* was the name of the network of leading scholars he assembled to chart the course of this new field and carry out these initiatives.

The birth and fast growth of positive psychology was due largely to Seligman's vision, organizational skills, public lectures, and fund-raising. Donations and grants from several organizations enabled Seligman to attract many leading scholars of all ages through research grants, awards, conferences and summer institutes. In addition, and importantly, many supportive colleagues of Seligman's played key roles in the many initiatives, as did a receptive public with whom the ideas resonated, enabling positive psychology to spread around the globe in a few short years.

It is important to note that Seligman does not claim that positive psychology is a new field, but has many distinguished ancestors. Since at least the time of Socrates, Plato, and Aristotle, the good life has been the subject of philosophical inquiry and many psychologists have been working in positive psychology topics for decades. The contribution of contemporary positive psychology has been to make the explicit argument that what makes life most worth living deserves its own empirically based field of study, to bring together isolated lines of theory and research under one scientific umbrella and call this field positive psychology, to promote the cross-fertilization of ideas through different social sciences, to develop a broader conceptual view of happiness, to bring this field to the attention of various foundations and funding agencies, to raise money for research, and to firmly ground all assertions in the scientific method.

The Positive Psychology Network (PPN) was first created with a generous gift from the Atlantic Philanthropies to Dr Seligman at the University of Pennsylvania. Matching funds quickly flowed from several other organizations, including the Annenberg Foundation, the Hovey Foundation, the Mayerson Foundation, the Mellon Foundation, the Pew Charitable Trusts, and the John Marks Templeton Foundation.

The following are some of the initiatives spearheaded by Dr Seligman, as a result of the generous support of these organizations.

## **Key Personnel**

First, Seligman assembled the intellectual and organizational infrastructure to carry out the positive psychology initiatives. He created the Positive Psychology Steering Committee, a group of leading scholars, to help him plan the goals and initiatives. This committee was initially comprised of Mihaly Csikszentmihalyi, Ed Diener, Ray Fowler, Kathleen Hall Jamieson, Robert Nozick, Christopher Peterson, and George Vaillant. He pegged his longtime colleague, Peter Schulman, to lead the organizational and financial running of the initiatives.

## **Classification of Strengths and Virtues**

The first great intellectual task, and the foundation of much that followed, was the creation of the classification and measurement of strengths and virtues, which led to a book and a self-report measure by Peterson and Seligman. These were made possible by generous support from the Mayerson Foundation and its Values In Action Institute.

## **Akumal Conferences**

In the first four years of the PPN, annual conferences were held in Akumal, Mexico. About 30 leading researchers, including the steering committee, attended each year to build research collaborations, cross-fertilize, and brainstorm future directions in positive psychology. One particular focus was to encourage and help fund young scientists.

## **Research Funding**

The PPN supported the research of about 30 groups of researchers (the pods) from over 50 universities. The pods included the Teaching Task Force, which created resources for teachers of positive psychology in high schools and colleges. The PPN also awarded over 25 microgrants, providing research seed funds to encourage promising early-career scholars who were developing innovative lines of empirical research in positive psychology.

## **Young Scholar Research Grants**

The PPN awarded more than 20 Young Scholar Grants to promising young researchers in positive psychology.



## **Templeton Positive Psychology Prize**

The first place prize (\$100,000) was the largest prize ever awarded in the field of psychology and was given each year for three years in recognition of excellence in positive psychology research.

## **Gallup International Positive Psychology Summit**

Starting in 1999, Gallup has sponsored the annual Positive Psychology Summit at their Washington, DC headquarters. This is a large conference open to the public, where cutting edge research is presented by leading researchers. The Summit is attended by hundreds of scholars and practitioners from around the world.

## **Positive Psychology Summer Institute**

The PPN convened five summer institutes from 2001 to 2005. As one of the most popular initiatives, the purpose of the institute was to provide support and mentoring for beginning researchers, as well as to develop a network of young, mid-career, and senior scholars interested in positive psychology.

## **Websites**

The PPN created two websites. They created [www.positivepsychology.org](http://www.positivepsychology.org) to provide practical resources for people interested in positive psychology, including researchers, students, teachers, and the general public. These resources include information on opportunities, upcoming conferences, resources for researchers (e.g., questionnaires and research summaries), resources for teachers (e.g., syllabi), educational programs, and general information and readings to help people learn about positive psychology. They created [www.authentic happiness.org](http://www.authentic happiness.org) to disseminate information about positive psychology to the general public in three languages – English, Chinese, and Spanish. This website has numerous online questionnaires that provide people with instant feedback.

SEE ALSO: ► Seligman, Martin

# Positive Psychotherapy

Tayyab Rashid

*University of Pennsylvania*

Positive psychotherapy (PPT) is a therapeutic movement within positive psychology to broaden the scope of traditional psychotherapy. It rests on the central hypothesis that building positive emotions, strengths and meaning, in addition to undoing symptoms, is efficacious in the treatment of psychopathology. Positive emotions, strengths and meaning serve us best not when life is easy but when life is difficult. For a depressed client, having and using strengths such as optimism, hope, zest, and social intelligence can be more important to counter depression than they are in good times.

PPT is based on three assumptions. First, psychopathology results when a person's inherent capacity for growth, fulfillment and happiness is thwarted. Most traditional psychotherapies, with the exception of client-centered therapy, assume that psychopathology engenders when: symptoms leak from the unconscious; maladaptive behaviors are strengthened by conditioning or environmental reinforcement; irrational and faulty thinking effects behavior and feeling; or troubled relationship patterns lead to resentment. On the contrary, PPT assumes that a client has good and bad states and traits, which influence each other and are also influenced by the larger culture and environment in which clients live. All clients have an inherent capacity for growth, fulfillment, flourishing and happiness, when this tendency is blocked, psychopathology results. Second, positive emotions and strengths are as authentic and real as symptoms and disorders. These are not defenses, Pollyannaish illusions, rose-tinted eye-glasses or clinical by-products of symptom relief which lie at the clinical peripheries and do not need exclusive attention. PPT regards positive emotions and the strengths of clients as authentic and values them in their own right. Within the framework of PPT, Mother Theresa's compassion for poor, Gandhi's and Martin Luther King Jr's struggle for civil rights, Eleanor Roosevelt's altruism, Aung San Suu Kyi and Shareen Abadi's political and social courage are considered as authentic and valuable in their own right, rather than as mere attempts to deal with anxiety, anger and an inferiority complex. According to the PPT perspective, human strengths are as authentic and real as weaknesses and therefore should command equal merit and as much therapeutic attention as do weaknesses.

Third, most traditional therapy is conducted by discussing troubles in-depth. The portrayal of psychotherapy in popular films and on television has socialized clients to the belief that therapy exclusively entails talking about troubles, ventilation of the inner child's bottled up emotions and recovering injured self-esteem. Exacerbated by negative bias, most clients come to therapy viewing themselves as deeply flawed, fragile, and see themselves as victims of cruel environmental or genetic causalities. Their anger stands out as compared to their gratitude. So

talking about troubles with an empathic, warm and genuine therapist is indeed a powerful cathartic experience. Any perceived failure to take clients' problems seriously may violate their expectations and could undermine the therapeutic relationship. Nevertheless, PPT believes that even clients who bring the weightiest psychopathological burden to therapy, care much more about their lives than just relief from their suffering. Clients want more satisfaction, contentment and joy; not just less sadness and worry. Therefore, PPT assumes that therapy is not a place where only resentment, frustration, jealousy, anxiety and competition is discussed and treated, but also a venue where active doses of hope, optimism, gratitude, compassion, contentment, modesty and emotional and social intelligence can be delivered. PPT also assumes that it is not an absolute *sine quo non* that only discussion of troubles builds strong therapeutic relationship and is essential for cure. Rather using the same therapeutic basics such as warmth, unconditional positive regard and empathic listening, the therapist can draw clients' attention to positive emotions and strengths in their lives in a gentle and careful manner. Doing so takes added importance because human beings in general, and clients coming to therapy in particular, are biased towards remembering the negative, attending to the negative, and expecting the worst. Riding on this negative bias, if the therapist is an authority in eliciting and interpreting negatives only, then clients' strengths will likely receive less attention and assume less importance. A therapist in traditional therapy may ask: *What personal weaknesses have lead to your troubles?* Whereas in PPT therapist may ask: *What strengths do you bring to deal with your troubles?*

Acknowledging that due to negativity bias and symptomatic stress, positives may not be readily accessible to the consciousness and memory of troubled clients, PPT actively elicits positive emotions and memories, in addition to discussing troubles. It is, as Duckworth, Steen and Seligman (2005) put it, a "build-what's-strong" approach to supplement the traditional "fix-what's-wrong" approach (p. 631). Thus, PPT discusses with clients the transgressions as well as acts of kindness; insults as well as compliments, selfishness as well as compassion and kindness of others; hubris as well as humility; hurry as well as harmony; hate as well as love; pain of trauma as well as potential growth from it. PPT purports that to create peaceful, fulfilling and flourishing selves, families and communities; we have to understand both the causes of anger and aggression and the determinants of empathy, kindness and love. PPT acknowledges that human beings are naturally biased toward remembering the negative, attending to the negative, and expecting the worst. Troubled clients coming for therapy are most proximally driven by negative memories, attention and expectations and often exaggerate this natural tendency. PPT through structured exercises aims to reeducate clients' attention, memory and expectations away from the negative toward the positive and hopeful" (Seligman, Rashid & Parks, 2006, p. 783). PPT believes that the equal and explicit discussion of weaknesses and strengths establishes a strong therapeutic relationship in which the therapist no longer remains an authority with expertise in diagnosing what is wrong with someone, but becomes a witness of the client's deepest and authentic psychological assets.

Any number of happiness and well-being interventions may constitute the content of PPT. However, so far PPT conducted in randomized clinical trials has followed happiness exercises which are devised from Seligman's three-tiered theory of happiness. According to this theory, *authentic happiness* is decomposed into three empirically distinguishable lives; the pleasant life, the engaged life and the meaningful life. These exercises are described in the PPT manual. An idealized individual PPT follows a 12 to 14 session protocol and includes exercises such as positive introduction, identification and building of signature strengths, good versus bad memories, forgiveness letter, gratitude visit, three nightly blessings, satisficing plan, three doors that closed and three doors that opened, active-constructive responding, family trees of strengths, savoring activity and gift of time. However, PPT can easily be incorporated in other treatments as an adjunct. An outcome measure, the Positive Psychotherapy Inventory (PPTI) to evaluate the effectiveness of PPT has been devised and validated.

Drawing systematic attention towards positives and engaging clients in intentional activities which utilize their strengths, are argued to be possible mechanisms of change in PPT. Intentional behavioral activities which are designed to create engagement and flow are vital to PPT. These are everyday, ordinary, normative, human experiences. Examples of such activities include painting, pottery, baking, reading, writing, socializing, helping others, savoring natural or artistic beauty, and rock climbing, for example. PPT emphasizes that these are not mere doings, rather they serve to bring clients' focus to the process rather than to the product.

Compared to experiences of sensory satisfaction to which clients adapt quickly, these engaging activities utilize clients' signature strengths, last longer and clients do not habituate easily. In addition, these activities offer numerous creative avenues for growth and flourishing, and even the pursuit of meaning.

Like any good therapy, PPT is sensitive and appreciative of the complexities of human beings. How positive states and traits interact with a client's personality disposition may differ markedly from one another. Clients may also differ in their motivational orientation to change long-standing behavioral patterns. For example, an introvert client may readily engage in activities which do not require lots of socialization yet provide her/him deep satisfaction. The therapist in PPT, therefore is encouraged to refrain from adopting a "one-size-fits-all" approach as it may not work with all clients. Additionally, the structure and sequence of exercises is kept flexible to accommodate and adapt to the uniqueness of each client.

Another daunting task for PPT therapist is to ensure that what is purported as "positive" is not perceived by clients as prescriptive. Just as medical research shows that eating vegetables and exercising is "good" for us, the contents of PPT are presented as descriptive with clear explanations of the documented benefits of positive emotions, strengths and meaning. Furthermore, negatives are never dismissed nor artificially replaced. Instead, when clients bring negatives, they are empathetically attended and offered time-proven traditional interventions to undo negatives. However, slowly and gradually attention is drawn to positive emotions,

strengths and meaning to widen the perspective about negatives. Thus, PPT does not compete with, but rather complements traditional therapeutic approaches.

SEE ALSO: ► Applied positive psychology ► Positive therapy ► Quality of life ► Well-being therapy

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## Positive Social Media

Naif Al-Mutawa  
Kuwait University

From the perspective of Albert Bandura's social cognitive or social learning theory, the advent of social media will have a prospectively significant and, on balance, a highly positive impact upon its participants, most notably through their potential for contributing to positive self-efficacy beliefs on the part of children and adolescents. According to Wikipedia (2007), "social media describe the online tools and platforms that people use to share opinions, insights, experiences and perspectives with each other." Not only is participation in *social media* growing at an astounding pace, new categories of social media are emerging as users innovate and experiment with existing Internet-based communication modalities. Individuals and organizations having a vested interest in the growth of social media typically envision an optimistic scenario for its influence upon users and, indeed, upon society at large. Thus, for example, Anthony Mayfield, the Head of Content and Media at the online company Spannerworks, has proclaimed that as a consequence of Internet-based social media, "people can find information, inspiration, like-minded people, communities, and collaborators faster than ever" (2006, p. 7). In the course of taking part in social media, the users themselves are likely to undergo changes in their attitudes and beliefs, notably in core identity constructs such as self-efficacy.

As Albert Bandura wrote in the opening chapter of *Social Foundations of Thought and Action*, no other form of cognition has a "more central or pervasive" influence on human behavior "than people's judgments of their capabilities to deal effectively with different realities" (p. 21). In an article appearing in the *Encyclopedia of Human Behavior* (1994), Bandura alluded to "a growing body of evidence that human accomplishments and positive well-being require an optimistic sense of personal

efficacy" (p. 76). Consistent with its antideterministic and inherently optimistic thrust, social cognitive theory posits that "perceived self-efficacy results from diverse sources of information conveyed vicariously and through social evaluation, as well as through direct experience" (Bandura, 1986, p. 411). The common and, indeed, the defining attributes of social media may well facilitate the acquisition of positive self-efficacy beliefs through three channels: mastery experiences, modeling, and social persuasion. Moreover, these processes are likely to have their greatest impact upon individuals in the formative stages of their development, that is, children and adolescents, the age groups in which users of social media are most heavily concentrated.

According to Mayfield (2006), there are, at present, five generic types of social media: 1) blogs; 2) social networks; 3) content communities; 4) *wikis*; and 5) podcasts (p. 6). Alternative classifications abound, attesting to the rapid evolution of social media and the associated difficulty of delineating boundaries between categories or classes of social media. Of the diverse forms of social media, however, *social networks* represent the most prevalent type and they are, in fact, the salient form from the standpoint of prospective impact upon self-efficacy. In their introduction to a study conducted as part of the Pew Internet and American Life Project, Amanda Lenhart and Mary Madden (2007) explained that "a social network is an online place where a user can create a profile and build a personal network that connects him or her to other users" (p. 1). It has been estimated that 55% of all American adolescents between the ages of 12 and 17 have created an online personal profile within a social network, using such Internet sites as MySpace.com or Facebook.com (Lenhart & Madden, 2007, p. 2).

Somewhat ironically, while the vast majority of children and teenagers in the United States are keenly aware of the rise of MySpace.com and of other types of social media, their adult counterparts (many of whom still report the status of "novice" in their understanding of consumer digital technology) are generally ignorant of these new forms of cyber-communication. Social media are in their infancy, so to speak: Indeed, the term social media is generally ascribed to Chris Shipley, who first used it in early months of 2004 to denote a "new form of participatory media" (Wikipedia, 2007). Since that time, individual participation in social media has expanded at an exponential and accelerating pace. In November of 2006, there were an estimated 60 million personal *blogs* in existence with their ranks literally doubling every six months, and there were over 107 million registered members of the social network website MySpace.com alone (Mayfield, 2006, p. 4).

Writing for an online edition of *Newsweek*, Steven Levy and Brad Stone (2006) reported that the founders of MySpace.com were motivated to go beyond "social computing" into full-fledged "social media" by their shared notion that "younger people get more out of the Internet if they could express themselves by putting information where their friends could see it." Participation is, in fact, a primary characteristic of all types of social media. In Mayfield's (2006, p. 5) estimation, five attributes are common among social media: 1) participation, the encouragement of contributions and feedback from everyone who is interested; 2) openness, with

few technical or resource barriers (including money) to individual access; 3) conversation, two-way, informal exchanges as opposed to one-way broadcasting of conventional media; 4) community, as all social media allow communities to form around common interests; and, 5) connectedness, with links to and combinations of different kinds of media accessibly in one place.

With this background in mind, we now turn to Bandura's work on self-efficacy. In his 1994 encyclopedia entry, Bandura defined the term *perceived self-efficacy* as "people's beliefs about their capabilities to produce designated levels of performance over events that affect their lives" (p. 97). Self-efficacy beliefs, in his view, "determine how people feel, think, motivate themselves and behave" (p. 71); positive self-efficacy beliefs generate desirable psychological and social outcomes through cognitive, motivational, affective, and selection processes (p. 71). Elaborating upon the potential effects of positive self-efficacy, Bandura asserted:

A strong sense of efficacy enhances human accomplishment and personal well-being in many ways. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Such an efficacious outlook fosters intrinsic interest and deep engrossment in activities. They set themselves challenging goals and maintain strong commitment to them. They quickly recover their sense of efficacy after failures and setbacks. They attribute failure to insufficient effort or to deficient knowledge and skills which are acquirable. They approach threatening situations with assurance that they can exercise control over them. Such an efficacious outlook produces personal accomplishments, reduces stress, and lowers vulnerability to depression. (1994, p. 71)

The possession of positive self-efficacy beliefs does not guarantee success in task performance or within any of life's domains: negative self-efficacy, however, clearly contributes to under-performance, isolation, and an array of psychosocial pathologies.

Bandura identified three basic ways in which an individual can acquire a strong sense of self-efficacy. The first of these, *mastery experiences*, unfold when individuals achieve challenging goals that require them to overcome obstacles through perseverant effort. Indeed, in social learning theory, mastery experiences are identified as the principal means through which personality changes take place. Social media furnish individuals, particularly children and adolescents, with an inherent opportunity to undergo mastery experiences. In Sonia Livingstone and Magdalena Bober's summary of the findings from a study sponsored by British government under the title of *UK Children Go Online*, we find that interviews with 1,511 children aged between 9 and 19 disclosed that most of these youthful participants recalled that they had not been taught Internet skills within their respective school systems. Instead, most had learned how to use the Internet through "trial and error" procedures supplemented by periodic communication with more technically-advanced peers or older children. Based on these results, Livingstone and Bober commented that "children often prefer to learn how to use the Internet by playing around with the medium and working things out for themselves"

(2004, p. 9). As a consequence of recent progress in making Internet tools more "user-friendly," even children can now utilize a wide range of social media. In this context, Mayfield has remarked, "even five years ago, it was still beyond most people's technical skills to create and maintain their own websites" (2006, p. 8). Today, however, many people, especially young people, can readily perform this task on their own or with a modicum of assistance. Indeed, studies of *Internet self-efficacy* or *Internet confidence* have uniformly found that children and teenagers are far more likely to state that they command "advanced" Internet skills than are adults (Livingstone & Bober, 2004, p. 11). Simply being able to set up a MySpace.com website and fill it with personally-relevant content frequently constitutes a potent mastery experience.

As Bonnie Strickland has noted, social learning theory presumes that a "child can learn without actually being rewarded or punished himself," through a process which Bandura referred to as *vicarious learning* (2001, p. 65). Vicarious learning takes place through the observing others demonstrate or model behaviors and inferable attitudes. "Seeing people similar to oneself succeed by sustained effort," Bandura argued, "raises observers' beliefs that they too possess the capabilities to master comparable activities to succeed" (1994, p. 72). For children and adolescents, modeling by age-peers amounts to "the most important points of reference for comparative efficacy appraisal and verification" (Bandura, 1986, p. 416). In the course of utilizing a social network like MySpace.com or Facebook.com, children will encounter and communicate with at least some age-peers who have been able to attain very high levels of digital sophistication but who are, at bottom, otherwise similar to themselves. Indeed, by dint of visiting MySpace.com or some other youth-oriented social network website, they are likely to gain access to informal social media use tutoring by children in their particular developmental stage. As Bandura also observed, in conventional "real world" relationships, "children tend to choose peers who share similar interests and values. Selective peer association will promote self-efficacy in directions of mutual interest, leaving other potentialities underdeveloped" (1994, p. 77). While participation in an online social network is often organized around interest or topical areas, the range of interests available in cyberspace is substantially greater than in the "real world." Consequently, the diversity of interests found in the "blogosphere" helps to overcome the limitations of relying upon "physical" contact with a much smaller universe of peers. Bandura also noted that "because peers serve as a major influence in the development and validation of self-efficacy, disrupted or impoverished peer relationships can adversely affect the growth of personal efficacy" (1994, p. 77). The likelihood that peer relations will be disrupted through, for example, a friend's relocation, is minimal in cyberspace; the presence of over 100 million MySpace.com users clearly militates against the "impoverishment" of peer relationships.

The third (and weakest) modality through which self-efficacy can be enhanced in Bandura's model is *social persuasion*. Such persuasion can contribute to the development of positive self-efficacy beliefs through credible messages from others that individuals can succeed even at difficult tasks, if they mobilize greater efforts



to accomplish ends in view (Bandura, 1994, p. 72). Participation in social networks exposes individuals, particularly young people, to a range of explanatory styles. Consistent with Bandura's social learning theory, Martin Seligman argued that cognitive styles are learned and that a child can acquire a pessimistic style for interpreting personally-relevant events that leads to a pervasive sense of helplessness that is associated with clinical depression. However, in *Learned Optimism*, Seligman noted that people, particularly younger individuals, can also learn positive explanatory styles, through direct or vicarious experiences. By taking part in a social network, users come into contact with individuals harboring a range of explanatory styles and they are exposed to optimistic templates for interpreting life events.

A fourth prospective self-efficacy "benefit" of social media that does not have an explicit correlate in Bandura's theory but that is nonetheless entirely congruent with it involves identity management. As Lenhart and Madden (2007) reported, in their use of online social networks, many adolescents reported making frequent visits to their own profile, checking in on a daily basis: among the teenagers in the Pew Internet Study, "those who are most interested in maintaining an appealing profile must make frequent visits to social network sites, both to edit one's own profile and to view the profiles of others" (p. 4). By the same token, a large proportion of the subjects in the *UK Children Go Online* research project told investigators that, in some instances, they prefer online communication to face-to-face contact with peers because it enables them to "manage to intimacy, embarrassment, or privacy" more effectively (Livingstone & Bober, 2004, p. 2). Given that negative evaluations from others can exert a destructive and enduring negative influence on self-efficacy, being able to: 1) manage the identity that they present to "visitors"; and 2) to "escape" negative assessments with a simple "double-click" on "exit" or "delete," furnishes young people with a means for avoiding the negative judgments of others that has no counterpart in real-world settings.

According to Livingstone and Bober (2004), while "online opportunities should surely engage children creatively, support their social, intellectual and personal development, and facilitate their active and critical participation in social and civic forums" (p. 22), there are, in fact, several prospective hazards entailed in children's entrance into virtual social networks. The most widely publicized of these dangers pivots on adult sexual predators cruising chat rooms in search of under-age victims. In the Pew study, however, most of the children and teenagers interviewed were assiduously aware of this danger and took steps to counteract it. Thus, for example, most (66%) of the respondents in the study who had created online profiles reported that they were not visible to all Internet users and that they had limited access to their personal information to known friends and contacts (Lenhart & Madden, 2007, p. 2). Similarly, while adults may be concerned that minors browsing the web in search of information lack the critical capacity to assess the trustworthiness or reliability of the content that they encounter, the majority of the children in the UK study expressed a "healthy" skepticism about the trustworthiness of content on some, or even all, websites (Livingstone & Bober, 2004, p. 13).

From a social learning standpoint, the most serious problem posed by social media entails the possibility that virtual or cyber relationships will replace “conventional,” face-to-face interactions. The bulk of the evidence indicates that this is not likely to be the case for most youthful users of social media. In fact, the UK researchers found that children and teenagers generally used the Internet to strengthen already existing relationships, particularly hard to maintain contacts with friends living abroad, distant relatives, or companions who have moved (Livingstone & Bober, 2004, p. 16). Concurrently, as Mayfield has stated, “the growth in use of social networks by young people in recent years has come at the expense of their consumption of traditional media such as TV and magazines” (2006, p. 24). From the standpoint of conventional media business interests, this is clearly a negative trend. But given the negative effects associated with excessive television watching by youngsters in Western societies, a reduction in television usage can be construed as a secondary benefit of social media. Finally, the use of the Internet in general appears to steer children and teenagers towards pursuing voluntary interests in important social domains. A full 55% of the UK youths indicated to researchers that they had actively sought out information on the Internet about political, environmental, human rights, or other “participatory issues” (Livingstone & Bober, 2004, p. 20).

As it now stands, it is “unclear whether the opportunities facilitated by the Internet represent a significant change in young people’s lives or, less dramatically, simply a new means of achieving familiar ends” (Livingstone & Bober, 2004, p. 4). The same, of course, can be said of social media that entail Internet usage. Nonetheless, when assessed against its likely influence on the development of positive self-efficacy perceptions, it does appear that social media have the capacity to enhance self-efficacy beliefs by providing and enlarging the channels identified by Bandura as sources of positive self-efficacy beliefs.

SEE ALSO: ► Self-efficacy ► Social cognitive theory ► Social support  
► Positive youth development

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## Positive Therapy

Stephen Joseph<sup>a</sup> and P. Alex Linley<sup>b</sup>

<sup>a</sup>University of Nottingham; <sup>b</sup>Centre for Applied Positive Psychology, UK

*Positive therapy* has been used to describe counseling and psychotherapeutic approaches that are consistent with the ambition of positive psychology to facilitate well-being and not simply to alleviate distress and dysfunction. The exemplar is client-centered therapy (CCT) originally developed by Carl Rogers. CCT is based on the meta-theoretical principle that people are intrinsically motivated toward fully functioning, but that intrinsic motivation can be distorted by unfavorable social environmental conditions resulting in distress and dysfunction. Thus, the therapist aims to provide a social environment that is facilitative of the client's intrinsic motivation. The term positive therapy has been used specifically by Joseph and Linley (2006) to describe positive psychological approaches that are based on this meta-theoretical principle:

positive therapy is based on the fundamental assumption that the client is their own best expert and that the role of the therapist is to facilitate the client in listening more attentively to their own inner voice, and to learn how to evaluate their experiences from an internal locus rather than an external locus . . . The essence of client-centred therapy is the belief in the self-determination of the client. (p. 140)

Positive therapy takes as a fundamental assumption about human nature the view that the actualizing tendency is the universal motivation of people to move toward growth, development, and autonomy. Given this constructive directional tendency in people, the role of the therapist within positive therapy is to enable the client to hear his or her own inner voice, or organismic valuing process, and to establish and then follow the directions that are right for him or her. This view found favor with advocates of the humanistic psychology movement, but lost currency as humanistic psychology became marginalized from mainstream

psychology. The advent of positive psychology has caused a reemergence and reexamination of some of these classical ideas from earlier humanistic psychology.

Research evidence in support of this fundamental assumption is not systematic, because it does not easily lend itself to empirical scrutiny. However, the available evidence is consistent. Self-determination theory has repeatedly demonstrated the role of intrinsic motivation in health and well-being, and Ken Sheldon and colleagues have demonstrated that when people shift their goal choices over time they do so in more intrinsic directions, taken to be indicative of the organismic valuing process that is operating within people. More broadly, Linley and Joseph have argued that the meta-theoretical stance of the actualizing tendency is the only view of human nature that can account for the broad research findings of positive psychology: All are interpretable within the framework of an actualizing tendency, but not within other fundamental assumptions.

Other psychological therapies that are considered as positive therapies because they share this meta-theoretical stance include many approaches derived from humanistic, existential, and experiential psychotherapy. In recent years there has been much interest in developing positive therapies and newly developed approaches include positive psychotherapy, well-being therapy, quality of life therapy, mindfulness-based cognitive therapy, and clinical approaches to posttraumatic growth. Future research should seek to extrapolate and empirically assess the evidence for the meta-theoretical stance of an actualizing tendency, and to examine the efficacy and effectiveness of positive therapies for both the alleviation of distress and the enhancement of well-being.

SEE ALSO: ► Actualizing tendency ► Humanistic psychology  
 ► Positive psychotherapy ► Quality of life therapy ► Rogers, Carl  
 ► Well-being therapy

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## Positive Youth Development

Richard F. Catalano<sup>a</sup> and John W. Toumbourou<sup>b</sup>

<sup>a</sup>University of Washington; <sup>b</sup>Deakin University and Murdoch Children's Research Institute VicHealth Fellow, Australia

In the twentieth century, childhood and adolescence have increasingly become regarded as special periods of development in which children were provided extra support to learn and develop. Programs that focus on enhancing positive youth

development are part of the response to providing extra support. Early in the century a number of important changes emerged including universal education delaying the entry into the workforce, and later changes in conceptualization of school and community practices to support the family to raise healthy children. At mid-century, federal funding initiatives began to address reducing juvenile crime, substance use, and academic failure through treatment and remedial programming. Prevention programs became part of the supports for childhood and adolescent development late in the twentieth century, with the first programs being trialed in the late 1960s and early 1970s, with the science of prevention being described in the 1990s.

Many early prevention efforts were not based on child development theory or research and most failed to show positive impacts on youth problems including drug use, pregnancy, sexually transmitted disease, school failure, or delinquent behavior. Faced with early failures, prevention program developers became increasingly aligned with the science of behavior development and change and began designing program elements to address predictors of specific problem behaviors identified in longitudinal and intervention studies of youth. A second generation of prevention efforts sought to use this information on predictors to interrupt the processes leading to specific problem behaviors.

In the 1980s, these prevention efforts which focused on predictors of a single problem behavior came under increasing criticism. Critics urged prevention program developers to consider the cooccurrence of problem behaviors and the extensive overlap in predictors across multiple problem behaviors. Further, many critics advocated a focus on factors that promote positive youth development in addition to focusing on reducing factors that predict problems. Such concerns, expressed by prevention practitioners, policy makers, and prevention scientists, helped expand the design of prevention programs to include components aimed at promoting positive youth development. These critics suggested that successful childhood and adolescent development required more than avoiding drugs, violence, school failure, or risky sexual activity. The promotion of children's social, emotional, cognitive, and moral development began to be seen as key to preventing problem behaviors themselves.

In the 1990s, practitioners, policy makers, and prevention scientists adopted a broader focus for addressing youth issues. Supported by a growing body of research on the developmental etiology of problem and positive behaviors and results from randomized and nonrandomized controlled trials of positive youth development programs, policy makers, practitioners, and prevention scientists were now converging in their focus on the developmental precursors of both positive and negative youth development.

In the late 1990s, youth development practitioners, the policy community, and prevention scientists reached similar conclusions about promoting better outcomes for youth. They all called for expanding programs beyond a single problem behavior focus and considering program effects on a range of positive and problem behaviors. Prevention and developmental research provide substantial

evidence that many youth outcomes, both positive and negative, are affected by the same predictors, including risk factors that increase the likelihood of problems and protective factors that appear to promote positive behavior or buffer the effects of risk exposure. The evidence that risk and protective factors are found across family, peer, school, and community environments led to recommendations that positive youth development interventions address multiple socialization forces – across family, school, community, peer, and individual development. This convergence in thinking has been recognized in forums on youth development including practitioners, policy makers, and prevention scientists who have advocated that models of healthy development hold the key to both health promotion and prevention of problem behaviors.

In reviewing the literature and conducting a consensus meeting of leading scientists, an operational definition of positive youth development constructs was created in 1997. This definition was further developed by a meeting of scientists organized by the Annenberg Sunnylands Trust. Space limitations preclude a full description of these constructs that are described in Catalano, Berglund, Ryan, Lonczak, & Hawkins (2002). The constructs included under the umbrella of positive youth development have emerged through consensus meetings involving scientists, practitioners, and policymakers synthesizing findings across the developmental, evaluation, and behavioral sciences. These efforts have married diverse science and practice across a range of disciplines and achieved an encompassing scope in the characterization of positive youth development. Constructs addressed by youth development programs include: promoting bonding; fostering resilience; promoting social, emotional, cognitive behavioral, and moral competence; fostering self-determination; fostering spirituality; fostering self-efficacy; fostering clear and positive identity; fostering belief in the future; providing recognition for positive behavior; providing opportunities for prosocial involvement; fostering prosocial norms; promoting life satisfaction; and promoting strength of character.

In the early twenty-first century, efforts have begun to emerge that attempt to tie this long list of youth developmental constructs together in theories of positive youth development. These theories attempt to improve our understanding of the mechanisms through which different risk and protective factors influence positive youth development and problem behavior.

A review of the efficacy of positive youth development programs used both evaluation design and program content as selection criteria (Catalano et al., 2002). Research designs had to be experimental or quasi-experimental without critical flaws that would affect conclusion validity. Programs had to address at least one positive youth development construct across multiple socialization domains, and the population served could not be selected because of their need for treatment. In addition, the review included only programs addressing youth between the ages of 6 and 20. These selection criteria produced a range of diverse youth development programs for review, some of which may be described as positive youth development, some as health and well-being promotion programs, and others as universal prevention. This diverse selection was due in part to the

convergence from multiple sectors of the call for positive youth development programs. For example, a number of programs traditionally considered primary prevention interventions incorporated many of the same positive youth development constructs as did programs viewed primarily as positive youth development programs.

Of the programs considered, 161 were identified as potentially within the scope of that review. Of these 77 of these positive youth development programs had evaluations that met the initial criteria for the review. Of the 77 programs, 8 with evaluations had to be removed from the review due to missing information. On closer inspection, 44 programs had evaluations with design flaws that affected conclusion validity (39) or did not have positive effects on behavioral outcomes (5). There were 25 programs that incorporated positive youth development constructs, had strong evaluation designs (experimental or quasi-experimental with viable comparison groups), provided adequate methodological detail to allow an independent assessment of the study's soundness, and produced evidence of significant effects on behavioral outcomes.

Program results are briefly summarized below. Illustrative references to articles describing outcomes of these programs are provided when the program is first mentioned. More complete descriptions of the programs, research designs, behavioral outcomes, and complete references are available elsewhere.

The following presents a selection of the positive youth outcomes. These included a variety of improvements in emotional competence, including greater self-control (PATHS, Bicultural Competence Skills), frustration tolerance (Children of Divorce), increased empathy (PATHS), and expression of feelings (Fast Track, PATHS). Improvements in social competence, including interpersonal skills (Adolescent Transitions Program, Child Development Project; Life Skills Training, Social Competence Promotion Program, Children of Divorce, Fast Track), greater assertiveness (Bicultural Competence Skills, Children of Divorce), greater self-efficacy with respect to substance use refusal (Project Northland), healthy and adaptive coping in peer-pressure situations (Bicultural Competence Skills), improvements in acceptance of authority (Fast Track), and improvements in race relations and perceptions of others from different cultural or ethnic groups (Woodrock Youth Development Project). Increases in cognitive competence included decision making (Life Skills Training) and better problem-solving (Children of Divorce, PATHS, Social Competence Promotion Program). Increases in behavioral competence included better health practices (Growing Healthy, Know Your Body) and greater self-efficacy around contraceptive practices (Reducing the Risk). Positive youth development programs were associated with improvements in parental bonding and communication (Seattle Social Development Project, Big Brothers/Big Sisters, Reducing the Risk). Positive outcomes also included increased acceptance of prosocial norms regarding substance use (Project ALERT, Life Skills Training). A variety of positive school outcomes were also achieved by some youth development programs, including higher achievement (Teen Outreach, Valued Youth Partnerships, Success for All, Big Brothers/Big Sisters, Seattle Social

Development Project), higher school attachment (Seattle Social Development Project), increased high school attendance (Quantum Opportunities, Big Brothers/Big Sisters), increased high school graduation (Across Ages, Quantum Opportunities Program, Seattle Social Development Project, Valued Youth Partnerships), and increased post-secondary school and college attendance (Quantum Opportunities Program, Seattle Social Development Project). Other positive youth outcomes included higher levels of voluntary community service (Across Ages) and use of community services when needed (Creating Lasting Connections).

Problem behaviors were also reduced or prevented. Substance use was lower for several programs, including alcohol or other drug use (Midwestern Prevention Project, Bicultural Competence Skills, Big Brothers/Big Sisters, Child Development Project, Life Skills Training, Project Alert, Project Northland, Seattle Social Development Project, Woodrock) and tobacco use (Child Development Project, Growing Healthy, Know Your Body, Life Skills Training, Midwestern Prevention Project, Project ALERT, Project Northland, Woodrock). Several programs reduced delinquency and aggression (Responding in Peaceful and Positive Ways, Metropolitan Area Child Study, Adolescent Transitions, Big Brothers/Big Sisters, Fast Track, PATHS, Seattle Social Development Project, Social Competence Promotion Program). Youth contraception practices increased and initiation and prevalence of sexual activity were reduced in two programs (Reducing the Risk, Seattle Social Development Project) and Teen Outreach and the Seattle Social Development Project reduced teen pregnancy. Negative school outcomes were reduced, including truancy (Big Brothers/Big Sisters) and school suspension (Responding in Peaceful and Positive Ways).

A summary of the characteristics of these 25 effective positive youth development programs is instructive but may not be typical of programs in general. These programs were fortunate to have attracted funding to support strong evaluations, thus, they may be at a later stage of development, having convinced funding sources of their evaluability. Evaluability usually entails a strong adherence to scientific behavior theory or empirical evidence in the rationale for the program components and resources that enable replicability, e.g., manualization of procedures and curricula specifying the logical links between procedures and outcomes.

In overview, these programs tended to be highly integrative, bringing together activities and components across multiple youth development domains and environments to achieve improvements in a range of positive and prevention constructs. All of the effective programs in this review addressed a minimum of five positive youth constructs and most interventions addressed at least eight constructs. Three constructs were common in all 25 well-evaluated programs: competence, self-efficacy, and prosocial norms. Several other constructs were addressed in over half of the 25 programs, including: opportunities for prosocial involvement (88%), recognition for positive behavior (88%), and bonding (76%), and 50% of the well-evaluated programs addressed positive identity, self-determination, belief in the future, resiliency and spirituality.



Having a structured curriculum or structured activities is critical for program replication. Of the well-evaluated effective programs, 24 (96%) incorporated a structured curriculum or program of activities. One program, Big Brothers/Big Sisters, did not focus on a structured strategy to build social competence. Big Brothers/Big Sisters assumed that positive outcomes are mediated by the bonding and other aspects of positive interaction (such as the presumed modeling of effective behavior by the adult) within the mentoring relationship. Of the effective, well-evaluated programs, 20 (80%) were delivered over a period of 9 months or more. In the interventions shorter than 9 months, programs ranged from 10 to 25 sessions, averaging about 12 sessions per intervention.

Fidelity of program implementation is one of the most important topics in the positive youth development field. Implementation fidelity has repeatedly been shown to be related to effectiveness. The effective positive youth development programs reviewed here consistently attended to the quality and consistency of program implementation. The majority of evaluations (24 [96%]) addressed and/or measured how well and how reliably the program implementers delivered the intervention.

Evaluation of a wide range of positive youth development approaches demonstrated that they can promote positive youth behavior and prevent youth problem behaviors. Positive changes in youth behavior were demonstrated in 19 effective programs and included significant improvements in interpersonal skills, quality of peer and adult relationships, self-control, problem-solving, cognitive competencies, self-efficacy, commitment to schooling, and academic achievement. Of the effective programs, 24 showed significant improvements in problem behaviors, including drug and alcohol use, school misbehavior, aggressive behavior, violence, truancy, high-risk sexual behavior, and smoking. The conclusion is clear that promotion and prevention programs that address positive youth development constructs are making a difference to important outcomes in studies with strong designs.

Although a broad range of strategies produced these results, the themes common to success involved methods to: strengthen social, emotional, behavioral, cognitive, and moral competencies; build self-efficacy; shape messages from family and community about clear standards for youth behavior; increase healthy bonding with adults, peers and younger children; expand opportunities and recognition for youth; provide structure and consistency in program delivery; and intervene with youth for at least 9 months. Although one-third of the effective programs operated in a single setting only, it is important to note that for the other two-thirds, combining the resources of the family, the community, and the school was important to success.

In sum, although the full promise of youth development rests on demonstration of long-term effectiveness in reducing problems and promoting positive development, there is clear evidence from well-conducted trials that positive youth development programs can be effective. Looking toward the future, there is potential to encourage the application and dissemination of these programs to achieve positive youth development in new areas aligned with international priorities,

including the United Nations Millennium Development goals aimed at eliminating poverty and ensuring peace, justice, and environmental survival.

SEE ALSO: ► Character education ► Developmental psychology  
► Moral development

## Reference

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## Possible Selves

Michael F. Hock, Irma F. Brasseur and Donald D. Deshler  
*University of Kansas*

The term *possible selves* has been reintroduced to the field of psychology by Hazel Markus, professor of psychology at Stanford University. Markus defined possible selves as, “the ideal selves that we would very much like to become. They are also the selves we could become and the selves we are afraid of becoming” (Markus & Nurius, 1986, p. 954). Markus stated that these ideas are motivating and can inspire us to attain goals related to future possible selves. When individuals have clear goals and specific plans for attaining those goals, they become motivated and willing to put forth the effort necessary to fulfill the desired goals. For example, a student who likes video games might have a hoped-for possible self as a highly successful video game programmer. She might be more likely to work hard in her algebra class if she saw the connection between attaining the desired possible self and the skills she would learn in algebra.

Markus also reports that individuals work just as hard to avoid possible selves they fear. For example, if a student has a feared possible self of having a job they dislike, he may be motivated to work hard and put forth effort to avoid such a future. Whether the person is working hard to attain or to avoid a possible self, thinking about possible selves can increase a person’s motivation to put forth effort to attain specified goals. In short, possible selves are a connection between one’s desired self-concept and motivation.

The nature of possible selves has been explored in descriptive research studies. These descriptive studies have shed light on whether certain groups do indeed, have future visions of possible selves and whether these possible selves are motivating. The results of these studies are somewhat mixed in terms of the effect of possible selves on achievement, but the studies show that most individuals seem

to have visions of themselves in the future and they try to attain these positive future selves and to avoid negative possible selves. For example, Markus and Nurius assessed the possible selves of college students. Most of the college students they assessed had some conceptual knowledge of what they hoped, expected, and feared in the future. In addition, most of the students identified more positive possibilities for the future than negative possibilities. Importantly, these future possible selves were different from their current selves, and the students believed they could attain their hoped-for selves.

Similar findings were reported for youth aged between 13 and 16. Youths attending a public school had no problems explaining what their possible selves were, and their explanations were diverse in nature. This finding also held true for youths who had been adjudicated and placed in delinquency programs. However, the nature of the possible selves of the groups differed. The adjudicated youth were focused on feared possible selves more so than hoped-for or expected possible selves, suggesting less balance between positive and negative selves and a sense of hopelessness.

In another study, college students were classified as being schematic (good problem-solvers) or aschematic (poor problem-solvers). Then the relationship of possible selves and self-schema to performance was assessed. While performance on problem-solving measures did not distinguish between the groups, those who were schematic and endorsed more positive possible selves enjoyed attacking problem-solving tasks and required less failure feedback than did the aschematic group. Open-ended questionnaires were administered in another study. Researchers reported that the use of open-ended questionnaires seemed to be an effective way to identify current and future possible selves, and that associations can be made between positive visions of one's self in the future and academic performance and deep processing or self-regulating strategy usage.

## **The Possible Selves Program: Nurturing Motivation**

Nurturing the motivation of students who are not motivated to engage in learning can be a challenge. In an effort to address this challenge, possible selves interventions have been developed to enhance academic and personal motivation in elementary through to postsecondary students. Preliminary studies indicate that when students become aware of their possible selves, they can increase the number of life roles they identify as possible for themselves in the future and the number of career, learning, and personal goals they wish to achieve.

In an early attempt at a possible selves program, Estrada developed an intervention based upon the construct of possible selves and designed to build awareness and clarity to the possible selves of Hispanic students in 2nd through to 7th grade. The intervention consisted of career, family, leisure, and friends awareness activities, discussion of the relationship between possible selves and high school graduation, how to deal with negative feedback, and coping with failure. The effects of the intervention were positive, with most gains in the number and specificity

of roles and goals identified as possible for the learner. Effects for increased grade performance in classes were moderate.

Building on the foundational principles described above (positive vision of one-self in the future, identification of goals, development of plans to attain goals), Hock, Schumaker, and Deshler developed and validated the Possible Selves Program to increase student motivation by having students examine their future and think about goals that are important to them. Students describe their hoped-for, expected, as well as feared possible selves. Once they have described their possible selves, they go on to create a "possible selves tree." Serving as a metaphor for their possible selves, the tree helps students examine the roles they will assume in life, their hopes, expectations, and fears for the future, as well as the overall condition of their tree. Based on an examination and evaluation of their possible selves tree, students take action by formally writing goals to nurture their trees, make plans for reaching their goals, and then work toward those goals. As a result of this process and evidence from research studies, students begin to view learning as a pathway to their hopes and expectations and as a way to prevent feared possible selves from happening. Thus, learning becomes more relevant because it is directly tied to students' personal interests and goals. Typically, an increase in student effort and commitment to learning follows.

The Possible Selves Program consists of six components designed to guide students in identifying and sharing their possible selves through goal setting and monitoring of progress toward goal attainment. The first component, *discovering*, helps the student answer the question, "What are my strengths and interests?" Here, the teacher engages students in activities designed to help them identify areas in which they have interests and skills and that make them feel good about themselves. The goal is to find an area in which each student has had positive experiences and that they are willing to share. By finding an area about which the student feels positive, the "pump is primed," and the student becomes more willing to share information related to areas about which he or she may not feel so positive (e.g., learning).

*Thinking*, the second component of the program, is designed to help the student answer the question, "Who am I?" During this phase, students complete a structured but open-ended interview, either individually or as part of a group. During the interview, students are asked to identify words and phrases that describe them individually as a learner, person, worker, and in the strength area that they identified during the discovering phase. They also define their hopes, expectations, and fears for the future in each area. In this way, an outline of the current self and possibilities for the future are developed within each area. Suggested interview questions include: "What statements or words best describe you as a learner?" "What do you hope to achieve as a learner?" "What do you expect to achieve as a learner?" "What do you fear as a learner?" As the students respond to questions and describe themselves, they write down their answers. Additional questions about the student's hopes, expectations, and fears for the future in at least two other domains are also recorded.

Once the interview has been completed, the third component of the Possible Selves Program, *sketching*, is introduced. Sketching helps students answer the question, "What am I like and what are my possible selves?" During this activity, students draw a possible selves tree. The teacher models how to draw each part of the tree and the students follow suit. The tree limbs represent students as a learners, persons, and workers. The branches represent hoped-for and expected possible selves in those three areas. Feared possible selves are represented by threats to the tree, such as lightning, termites, poison in the soil, and so on. Finally, the roots of the tree represent the words used by the student to describe him or herself. After the tree is drawn, preliminary goals are discussed concerning how to keep the tree strong, make it fuller, protect it from fears, and provide it with nourishment. In short, the student is asked to briefly think about the tree and ways to nurture and protect it.

The fourth component of the program, *reflecting*, helps students answer the question, "What can I be?" This phase provides an opportunity for students to evaluate the condition of their tree and set goals for the future. This reflection activity also includes a discussion of how learning can support the health of the student's tree.

The fifth component, *growing*, helps the student answer the question, "How do I accomplish my goals?" The purpose here is to get students to start thinking about specific ways to nurture and "grow" their trees and attain identified goals. If, for example, a student identified a hope-for a career as the owner of a music business, a singer, a diesel technician, or a player in the National Football League (NFL), the student can develop the short- and long-term goals that are necessary to attain this "possible self" and generate a plan to reach these goals. In addition, students may discover that the same goals help them avoid the "feared selves" that have been identified (e.g., no job, no money, no friends). In short, during the growing activities, the student constructs a well-developed action plan that serves as a pathway to support the attainment of long-term goals and hopes for the future.

The sixth and final component is *performing*. This component helps students answer the question, "How am I doing?" During this phase, the possible selves tree, the goals established to nurture the tree, and the action plans are revisited and revised regularly. Task completion is reviewed, goals and action plans are modified, goal attainment is celebrated, new goals are added, and hopes, expectations, and fears are continually examined. For example, if the stated goal of playing football in the NFL is no longer considered viable by the student, new and perhaps related goals are identified. The student may see coaching middle school football as a more realistic career, and that goal then becomes the focus of the revised action plan.

## **The Future of Possible Selves**

While there is a growing literature on the construct of possible selves, the majority of the research has focused on describing the various dimensions of possible

selves in populations with different characteristics under different conditions. Thus, there is a paucity of studies investigating how to effectively teach individuals to become aware of their possible selves and how to set and work toward meaningful goals in light of their possible selves knowledge. Research is needed to determine the sustainability of effects of possible selves intervention programs, the ecological conditions that are most conducive to teaching and learning components of possible selves programs, the role that behaviors such as self-advocacy play in enabling people to use their possible selves to set and work toward goals, and strategies for operationalizing a possible selves program across ages and grade levels – how to optimally structure programs for students of different ages and reinforced by different teachers and adults (e.g., counselors) who interact with them. In short, much work needs to be done to determine the ultimate impact of possible selves as a tool for improving student engagement in the learning process and how it can be best leveraged to improve academic and social outcomes.

SEE ALSO: ► Actualizing tendency ► Narrative identity

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## Posttraumatic Growth

P. Alex Linley<sup>a</sup> and Stephen Joseph<sup>b</sup>

<sup>a</sup>Centre for Applied Positive Psychology, UK; <sup>b</sup>University of Nottingham

*Posttraumatic growth* refers to the constellation of positive changes that people may experience following a trauma or other stressful event. The term was introduced by Richard Tedeschi and Lawrence Calhoun in 1995, in the context of the Posttraumatic Growth Inventory, a self-report assessment of the construct that was first presented in their book *Trauma and Transformation: Growing in the Aftermath of Suffering*. Conceptually, posttraumatic growth is described as consisting of three broad dimensions. First, people often report that their relationships are enhanced in some way, for example that they now value their friends and family more, and feel an increased compassion and altruism toward others. Second, survivors change their views of themselves in some way, for example, that they have a greater sense of personal resiliency and strength, perhaps coupled with a greater acceptance of their vulnerabilities and limitations. Third, there are often reports of changes in life philosophy, for example, survivors report finding a fresh appreciation for each new day, and renegotiating what really matters to them in the full realization that their life is finite. Unlike resilience, which connotes a stability of functioning in the face of adversity, posttraumatic growth refers to a nonnormative positive shift

in functioning, and has been likened to using the traumatic experience as a springboard or trampoline to achieve a higher level of posttrauma functioning than existed at the pretrauma baseline.

Although it has only been the focus of research attention since the 1990s, the concept of posttraumatic growth, or positive change following trauma, has been recognized throughout human history. The value of suffering is a theme of many of the world's religions (e.g., the crucifixion of Jesus within Christianity), as well as being recurrent throughout existential philosophy (e.g., Nietzsche's dictum: "What does not kill me, makes me stronger," 1889/2003, p. 33), literature (the Russian novelist Fyodor Dostoevsky drew on his own experiences of a mock execution to inform his writing; the Italian poet Dante Alighieri wrote of the loss of his own great love in his masterpiece *The Divine Comedy*), and psychology itself (Viktor Frankl tested his own theories of logotherapy when being held in the Nazi concentration camps; Aaron Antonovsky developed his theory of salutogenesis as a way to explain the recovery and growth of his Jewish compatriots following the Second World War).

While the term posttraumatic growth is the most widely used label for the construct of positive change following trauma and adversity, a number of other terms have been developed and are often used interchangeably. These include *stress-related growth*, *adversarial growth*, *positive adaptation*, *positive changes*, *positive by-products*, *benefit finding*, *perceived benefits*, *thriving*, *flourishing*, and *growth following adversity*. Importantly, posttraumatic growth does not require the presence of a DSM-IV Criterion A traumatic stressor for the use of the term posttraumatic growth to be considered appropriate. Posttraumatic growth is considered a much more normative and dimensional phenomenon than posttraumatic stress disorder, which, coming from a medical model perspective, requires the presence of a specifically defined traumatic stressor before a diagnosis can be made. In contrast, posttraumatic growth is considered a more normative developmental experience, and as such may be reported following apparently more minor difficulties and stresses, and not just major traumatic events.

The events for which posttraumatic growth outcomes have been reported include transportation accidents (shipping disasters, plane crashes, car accidents), natural disasters (hurricanes, earthquakes), interpersonal experiences (combat, rape, sexual assault, child abuse), medical problems (cancer, heart attack, brain injury, spinal cord injury, HIV/AIDS, leukemia, rheumatoid arthritis, multiple sclerosis, illness) and more normative life experiences (relationship breakdown, parental divorce, bereavement, immigration). Further, vicarious experiences of posttraumatic growth have been shown in a variety of populations not directly suffering themselves, but exposed to the suffering of others, including counselors, therapists, clinical psychologists, funeral directors, disaster workers, spouses of people with cancer, and even British people who saw the September 11, 2001, terrorist attacks on television.

Several variables have been found to be consistently related to posttraumatic growth, including appraisals of greater threat, harm, and controllability (although

it is likely that there is a curvilinear relationship with threat and harm); problem-focused, acceptance, and positive reinterpretation coping; optimism; religion; cognitive processing; and positive affect. Studies have shown inconsistent associations between a number of sociodemographic variables (gender, age, education and income) and psychological distress variables (depression, anxiety, post-traumatic stress disorder), although the evidence suggests that people who report posttraumatic growth and maintain that growth over time are likely to report less subsequent psychological distress.

## Models of Posttraumatic Growth

The two most elaborated models of posttraumatic growth are the functional-descriptive model proposed by Richard Tedeschi and Lawrence Calhoun, and the organismic valuing model proposed by Stephen Joseph and Alex Linley. The functional-descriptive model is premised on the importance of appraisal processes, and discusses how traumatic events serve as seismic challenges to the pretrauma schema, by shattering prior goals, beliefs, and ways of managing emotional distress. The shattering of these schemas leads to ruminative activity, as people try to make sense of what has happened and to deal with their emotional reactions to the trauma. In the initial stages, this ruminative activity is more automatic than deliberate (consistent with the reexperiencing and avoidance symptom clusters within posttraumatic stress disorder, PTSD). Although this automatic ruminative activity is often distressing, it is indicative of cognitive activity that is directed at rebuilding the pretrauma schema. This ruminative process is influenced by social support networks that provide sources of comfort and relief, as well as being influenced by new coping behaviors and the options that are available for the construction of new, posttrauma schemas.

Successful coping at this stage facilitates disengagement from goals that are now unreachable, and beliefs that are no longer tenable in the posttrauma environment, together with decreased emotional distress. As successful coping aids adaptation, the initial ruminative activity that was characterized by its automatic nature shifts towards a more effortful ruminative activity. This effortful ruminative activity is characterized by narrative development, part of which may be the search for meaning. Interacting with this process is the experience and self-identification of adversarial growth. Importantly, although this shift toward more effortful ruminative activity represents growthful adaptation, it does not exclude the possibility of some enduring distress from the trauma, but at a lower level than was experienced in the immediate aftermath.

Building on positive psychological perspectives and the person-centered approach, Stephen Joseph and Alex Linley developed the organismic valuing theory of growth following adversity. The *organismic valuing process* (OVP) refers to people's innate ability to know what is important to them and what is essential for a fulfilling life, based on the view that human beings can be relied on through their physiological



processes to know what they need from their environment and what is right for them to grow and develop. As with the functional-descriptive model, the confrontation with an adverse event has a shattering effect on the person's assumptive world, and following the completion tendency there is a need to integrate the new trauma-related information. The completion principle is the foundation of a number of cognitive-emotional processing models in the posttraumatic stress literature, and within the organismic valuing theory, the completion principle is viewed as an aspect of the organismic valuing process. Organismic valuing theory posits that when the social environment is able to provide for the basic human needs of autonomy, competence, and relatedness, then growth will be promoted. The theory holds that it is human nature to modify existing models of the world to positively accommodate new trauma-related information when the social environment provides the basic nutrients for growth; however, the social environment does not always provide the nutrients for growth, and as such people may assimilate or negatively accommodate the trauma-related information.

The new trauma-related information is stored in active memory, awaiting processing, and this in turn leads to the intrusive states. However, this leads to high states of distress and arousal that need to be defended against, hence the avoidance states. The person goes through a series of oscillating phases of intrusion and avoidance as the new trauma-related information is processed. When a baseline is reached and intrusive and avoidant states are no longer present this is explained as resulting from cognitive assimilation of the traumatic memory or a revision of existing schemas to accommodate new information. Following adverse events, new trauma-related information can only be processed in one of two ways. Either, the new trauma-related information must be *assimilated* within existing models of the world, or existing models of the world must *accommodate* the new trauma-related information which requires people to change their worldviews.

Theoretically, the alleviation of posttraumatic stress disorder symptoms can come about either through assimilation or through accommodation of the new trauma-related information, as the person must somehow integrate the material, thus allowing them to return to a pretrauma baseline. However, to move beyond the pretrauma baseline requires accommodation as opposed to assimilation, given that as growth is, by definition, about new worldviews.

Thus, within the organismic valuing theory, three cognitive outcomes to the psychological resolution of trauma-related difficulties are posited. First, that experiences are assimilated, leading to a return to pretrauma baseline, but also leaving the person vulnerable to future retraumatization. Second, that experiences are accommodated in a negative direction, leading to psychopathology and distress because the person feels helpless and hopeless. Third, that experiences are accommodated in a positive direction, leading to growth because the person has evolved and developed their world view in light of the new traumatic information. The distinctions between these three cognitive outcomes are a major novel contribution of the organismic valuing theory of posttraumatic growth. One of the most important aspects of OVP theory is that it provides an integrative social-

cognitive model that integrates what we know about posttraumatic stress with what is known about posttraumatic growth. Building on this, recent theoretical work by Joseph and Linley has been concerned with the integration of posttraumatic stress and posttraumatic growth within a unitary psychosocial framework from a positive psychological perspective, an approach which is premised on the value of examining and integrating both the positive and negative aspects of human experience.

## Assessment of Posttraumatic Growth

The assessment of posttraumatic growth has typically depended on retrospective self-report measures, the most widely used of which are the Posttraumatic Growth Inventory and the Changes in Outlook Questionnaire. The Posttraumatic Growth Inventory measures five dimensions of posttraumatic growth, namely relating to others, personal strength, new possibilities, appreciation of life, and spiritual change. The Changes in Outlook Questionnaire measures two dimensions of positive changes and negative changes. Other generic self-report measures of positive changes following trauma and adversity include the Stress-Related Growth Scale, the Perceived Benefits Scales, and the Thriving Scale, as well as a number of other measures developed for use with specific trauma populations (e.g., cancer, multiple sclerosis).

The accuracy and reliability of these retrospective self-report measures of growth have been called into question by Julian Ford, Howard Tennen, and David Albert, who identified the five mental processes through which a respondent must work in order to answer a posttraumatic growth rating statement: evaluate his/her current standing on a dimension; recall his/her previous standing on the same dimension; compare current and previous standings; assess the degree of change; and finally determine how much of that change is attributable to the traumatic or stressful event in question. Taking into account the complexity of these mental operations, and the likelihood that respondents to posttraumatic growth questions do not systematically compute all of them, a number of methodological issues have been raised for research into and assessment of posttraumatic growth. One of the biggest challenges for the posttraumatic growth field as it moves forward will be to establish empirical findings on a more rigorous methodological and statistical footing.

SEE ALSO: ► Benefit finding ► Frankl, Viktor ► Resilience ► Suffering

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## Prayer

Maggie Syme<sup>a</sup> and Rebecca Syme<sup>b</sup>

<sup>a</sup>University of Kansas; <sup>b</sup>Bethel Seminary

Prayer is an act of communication between an individual and a specific reality, such as a supernatural being or natural force. It is a central practice of many religions, typically the means of connecting the individual or group to the divine. However, prayer has been shown to be prevalent among both religious and non-religious persons. The multidimensional nature of prayer makes it easily adaptable to a variety of human experiences.

Though prayer is used by both religious and nonreligious alike, the dominant function of prayer is as a means of religious expression. Each religion, however, utilizes prayer in a slightly different way. In some religions, for instance, prayer is a daily requirement, whereas other religions encourage regular prayer with no stipulated practice. Some faiths encourage public prayer and some emphasize private prayer. The monotheistic religions emphasize both ritual (or sacramental) and spontaneous prayer. Most religions believe that the divine being or force (god, universe, nature) reciprocates communication with the individual or group and may measure the effectiveness of prayer by external signs or circumstances.

Different religions emphasize different elements of prayer. The Second Pillar of Islam is ritual prayer – five prayers each day at set times with accompanying bodily positions of veneration. Buddhists practice *metta*, which is a combination of concentrated visioning and directed words or thoughts of loving kindness. Jews use a prayer book called the *siddur* to guide them through daily prayers and place a high value on corporate prayer. Catholic Christians memorize prayers that can be used as either acts of worship or signs of repentance or penance, such as the Divine Praises and the Act of Contrition. Some Christians practice listening prayer where the person silently awaits words from the divine. Yet as different as they are, many of these traditions overlap or practice prayer in ways virtually indistinguishable from one another. Among religions that worship a deity, prayer is the way humans commune with the object of worship and receive communication in return.

A multitude of research has been conducted on prayer, which has illustrated its complex nature. These studies have been primarily based on theoretical hypotheses about the nature of prayer and its possible typology. Subsequently, few empirically based studies have been conducted to ascertain distinct prayer types. Of those, there is considerable semantic overlap and little consistency in the number of prayer types. This may be due to the diverse ways in which prayer is viewed and used by individuals. It has been proposed that the type of prayer utilized will often depend on the context, the individual, the goal of prayer, and several other factors. Types of prayers include expressions of suffering, contemplations, intercessions for others, personal petitions, confessions, adorations, sacraments, and giving thanks.

Assessments of prayer have been developed to encompass the dimensions of prayer, such as the Multidimensional Prayer Inventory and the Inward, Outward, Upward Prayer scale. These measures seek to improve upon the early measures of prayer determining only the frequency of prayer, which were comprised of one item relying solely on the frequency of occurrence; these have been criticized as an incomplete representation of the multidimensional nature of prayer and its many uses. These new measures also provide assessments focused specifically on prayer, as opposed to being a part of an overall spiritual coping or religious practices scale.

Research has repeatedly demonstrated the benefits associated with prayer, including improved mental health, greater marital satisfaction, recovery from substance abuse and many other mental and physical health benefits. These benefits may be due to the fact that prayer often functions as a resource and coping strategy for individuals across sociodemographic variables.

For example, prayer can be a way to exercise control over an otherwise uncontrollable situation by appealing to a sovereign power. Research conducted with various medical populations suggests that prayer may be used as a reminder of the sovereignty and omnipotence of the deity being addressed and may result in a feeling of peace, knowing that an all-powerful deity is watching over the individual. Prayer may also provide a sense of belonging through the connection to both a deity and a larger group of worshipers. This connection is reportedly present in private as well as corporate worship.

Prayer has also been described by professional black women as a way to meditate, quiet the self, increase personal strength, assist in decision-making and gain some perspective in a stressful situation. People experiencing suffering have also been known to utilize prayer to help understand and accept their situation. Individuals with an illness or severe injury may use different types of prayer to explain and accept their circumstances as being part of God's plan. The coping function of prayer in those with physical impairments has received considerable attention in the research literature. It has been shown to be a primary resource for those suffering from chronic pain, terminal illness, and various physical ailments, as well as a resource for their caregivers.

Whether prayer directly or indirectly causes positive effects in people's lives is unknown. One role of prayer may be to bolster other positive psychological factors, such as optimism and hope, which in turn lead to other benefits. For example, personal fulfillment through prayer and meditation has been linked to greater optimism and social support, both being positively related to life satisfaction. Prayer has also been positively correlated with the agency factor of hope as well as finding increased meaning in life. The conclusion that prayer is a direct cause of improved physical and mental health has been a contention among scholars. Researchers continue to call for further investigation into the specific role of prayer as a coping resource and protective factor.

SEE ALSO: ► Buddhism ► Coping ► Mental health ► Religiousness  
► Spirituality

## Prevention Focus

E. Tory Higgins

*Columbia University*

Prevention focus is one of two distinct regulatory systems that has developed to deal with a distinct survival concern – security. To survive, people (and other animals) need both nurturance and security; they need support or nourishment from the environment (often provided by others), as well as protection from dangers in the environment (social and physical dangers). When people succeed in satisfying a concern they experience pleasure, and when they fail they experience pain. Thus, both nurturance and security systems involve approaching pleasure and avoiding pain. However, the nurturance and security systems differ in *how* pleasure is approached and pain is avoided.

The security system is associated with the development of *prevention focus* and concerns safety, with meeting duties and obligations (oughts). People can succeed or fail to fulfill their prevention focus concerns, and thus experience pleasure from success and pain from failure. But hedonic experiences are not the end of the story. There are distinct emotional and motivational consequences of self-regulation in a prevention focus.

Individuals with a prevention focus use ought self-guides in their self-regulation. Self-guides are self-directive standards, which function as a major source of people's emotions and motivation. They both directly prompt action as desired end-states (i.e., goals to be attained), and, through their use in self-evaluation (i.e., standards to be met), arouse emotions that are themselves motivating. Ought self-guides represent a person's beliefs about his or her duties, responsibilities and obligations. Ought self-guides vary in strength across persons (between individuals) and across situations (within individuals). There are different modes of strong socialization that produce strong ought self-guides. Strong ought self-guides are produced by interactions with significant others that involve protection and safeguarding, as well as punishment and criticism for failure to meet an ought self-guide. When self-guides are strong from socialization, they have high chronic accessibility. They predominate in self-regulation for years. When strong ought self-guides predominate, people have a prevention focus on duties and obligations.

When people are in the prevention focus system, they experience quiescence-related emotions following success (e.g., calm, relaxed) and agitation-related emotions following failure (e.g., nervous, tense). This is true whether people are in a prevention focus from a chronic predisposition to be in that system or from a current situation activating that system. Individuals in a prevention focus more readily appraise objects and events in the world (e.g., exams, money, garbage, music) along a quiescence-agitation dimension than a cheerfulness-dejection dimension.

Individuals with a prevention focus not only have a distinct emotional life, they also have a distinct motivational life. Importantly, they have distinct *strategic preferences* when they pursue goals and make decisions. Individuals in a prevention focus

prefer to use *vigilant* strategies to pursue goals or make decisions (a nonloss). Vigilant strategies are strategies of carefulness, strategies to prevent movement from a current neutral or satisfactory status quo to a less desirable or negative state. Individuals in a prevention focus experience positive and negative events in the world as nonlosses and losses, respectively, because their concerns are about safety and meeting obligations. Strategic vigilance is also about trying to be careful to ensure nonlosses and not wanting to commit mistakes that produce a loss, so vigilance fits a prevention focus.

Strategic vigilance is also about ensuring nonlosses and not wanting losses, so vigilance sustains or fits a prevention focus. Indeed, many studies have found that individuals in a prevention focus prefer to use vigilant strategies to pursue goals or make decisions. There is also evidence that when the strategic approach to an achievement task is experimentally manipulated, individuals in a prevention focus perform better when instructed to use vigilant means than when instructed to use eager means. Persuasive messages with a vigilant tone (vs. an eager tone) are more effective in changing the attitudes of individuals with a prevention focus. The prevention focus on vigilant nonlosses also influences how ingroup bias is displayed. For individuals in a prevention focus, outgroup members are treated with a negative bias ("preventing them") rather than ingroup members being treated with a positive bias ("promoting us").

The fact that vigilance sustains or fits a prevention focus has other implications as well. It means that individuals with a prevention focus will be motivated to imagine or anticipate the possibility of future failure in order to create a vigilance in the present that will sustain their motivation ("defensive pessimism"). Because of this, individuals who are effective at maintaining their prevention focus are less optimistic than other people, without being pessimistic. They also have lower self-esteem, without having low self-esteem. In addition, when they succeed at a task they are less likely than other people to raise their expectations and expect success the next time. After success they will even lower their self-esteem if they need to remain vigilant for the next task. The relatively lower self-esteem associated with individuals who have effective prevention has been found not only in the United States but also in other nations, such as Italy, India, Israel, and Japan. There is also evidence from several nations that individuals with effective prevention are also generally less extroverted than others.

Regulatory fit increases strength of engagement, which intensifies evaluative reactions, and regulatory nonfit decreases strength of engagement, which deintensifies evaluative reactions. This contributes to the emotional responses of individuals with a prevention focus. When individuals succeed in a prevention focus it decreases their vigilance, creating a regulatory nonfit that reduces engagement strength, which is then experienced as low-intensity calmness. When individuals fail in a prevention focus it increases their vigilance, creating a regulatory fit that strengthens engagement, which is then experienced as high-intensity nervousness. When failures become severe and prolonged, individuals with a strong prevention focus are vulnerable to suffering from generalized anxiety.

Regulatory focus differences in strategic approaches are especially likely to be revealed when there is a conflict between different choices or different ways to proceed on a task. One prevalent conflict is between being “risky” or being “conservative” when making a judgment or decision. When people are uncertain, they can take a chance and treat something as being correct that could actually be incorrect (a possible error of commission). Alternatively, they can be cautious and reject something as being incorrect that could actually be correct (a possible error of omission). Studies on memory, judgment, and decision making have found that, when the status quo is satisfactory, individuals with a strong prevention focus tend to be more conservative than other people. When the current state is not satisfactory, however, and the conservative option would improve things but not get all the way back to the satisfactory status quo, then individuals with a prevention focus tend to be even riskier than other people – doing whatever is necessary to get back to the satisfactory status quo.

There is also evidence that individuals in a prevention focus are less creative than those in a promotion focus, and are also less willing to change and try something new when given the opportunity. Under conditions of uncertainty (and a satisfactory status quo), individuals in a prevention focus, compared to other people, are less willing to consider new alternatives and more likely to stick with the established state of affairs. Although individuals in a prevention focus tend to be less creative than others, they are more likely to carry out a creative decision in the face of obstacles. More generally, they are more likely to maintain commitments. Individuals in a prevention focus are also more analytic than others.

There are other conflicts on which individuals in a prevention focus act differently than other people. One classic conflict on many tasks is between speed (or quantity) and accuracy (or quality). Compared to others, individuals with a prevention focus emphasize accuracy more than speed. A third conflict concerns whether to represent objects or events in a more global and abstract manner or in a more local and concrete manner. Compared to others, individuals with a prevention focus are more likely to represent objects and events in a local and concrete manner (as well as less temporally distant) than in a global and abstract manner.

SEE ALSO: ► Goals and goal-setting theory ► Hedonics ► Promotion focus  
► Self-esteem ► Self-regulation

## **Pride**

Sara Cho Kim

*University of Wisconsin – Madison*

*Pride* is commonly defined as a positive emotion that contributes to the development of healthy self-esteem. The behavioral and emotional components of pride

are often associated with success, achievement, and group membership. At an extreme level, pride is associated with narcissism, a personality trait, which can negatively affect an individual's ability to interact in social situations. In addition, the lack or loss of pride can contribute to an increase in aggressive, hostile, and destructive attitudes and/or behavior.

## **Major Dimensions of Pride**

In experiencing pride, areas of achievement are where pride is most widely cited. Pride encourages prosocial behaviors like achievement and success. The achievement domain can span areas such as performance in an athletic competition, school grades and earning top honors in the military. In addition, pride is intricately involved with the functioning and maintenance of self-esteem. Pride is considered one of the primary emotional components to self-esteem. Based on socialization, pride is involved in a number of interpersonal processes from boosting one's self-esteem to signaling to others that his or her behavior is valuable and an important member of the group. In other words, pride can be interpreted as an evaluation of self-worth and can be highly subjective.

Understanding pride involves examining the affiliative and intersubjective components where social comparisons are expected. For example, an athlete running in a sporting event is competing against his or her peers to win first place. The affiliative or social component of pride involves social status and distinction from others. Individuals desire esteem for their accomplishments, recognition for their achievements, and increased social status in the social hierarchy. Public recognition of achievement contributes to pride. For example, when individuals in Western cultures outperform others and receive recognition for their success, they feel proud. The feeling of pride, however, occurs when there is a sense of personal responsibility (e.g., I trained diligently for the race) and a favorable outcome (e.g., I won because I trained hard).

The expression of pride is another integral component to consider. The outward expression of pride serves the purpose of conveying the message that this individual warrants attention from the social group that he, she, or the group merits acceptance, respect, and recognition. For example, some nonverbal expressions of pride may include a picture of an individual with their head tilted upwards, arms up in the air as a sign of victory, or hands on their hips denoting confidence and pride. Associated with feelings of satisfaction and self-worth, outward expressions of pride are publicity for a job well done.

## **Pride Based on Group Membership**

In one's life, pride is expressed based on group membership. One example is the concept of ethnic pride, which involves positive attitudes toward and association



with one's group of origin. Ethnic pride provides a sense of belonging as a member of a group. Strong identification with a group is a form of self-empowerment. By identifying as a member of a cultural group – racial or ethnic group, sexual orientation, occupation, or special interest group (e.g., motorcycle club membership) – one's pride is based on affiliation and involvement with the group.

A sense of belonging and contributing to a group elicits feelings of pride, a sense of security, and acceptance. Individuals may choose to retain distinct qualities based on their group membership as a result of pride in their shared ethnic heritage. For example ethnic pride serves several protective factors that can contribute to increased positive regard for self and others, resilience, and positive well-being. Ethnic pride and affiliation has been shown to buffer the effects of racism, discrimination, and microaggressions that assault members of disenfranchised groups.

Not all cultural groups may agree on the positive attributes of pride. For example, in collectivistic cultures, feelings of pride are based on the "collective good" where one's accomplishment reflects positively on the group and not only on the individual. For members in Judeo-Christian religious groups, pride is often referred to as a sin. References in the Bible extol the virtues of humility, while pride is to be avoided.

## **Methodological Issues and Problems Associated with Pride**

Researchers have noted the difficulty in determining the complexity of the emotion of pride. Adding to this difficulty is a shortage of well-constructed scales that can be used to measure the construct of pride.

Relegated to a secondary emotional status, it has not received much attention over the years. Yet, research has demonstrated that children as young as five years old are able to recognize expressions of pride and distinguish it from other positive emotions like happiness.

## **Future Directions**

Developing an interdisciplinary understanding and expansion of the topic of pride would increase our understanding of this complex, multifaceted positive emotion. A well-constructed and empirically sound scale would also serve to increase interest in studying pride. Including cultural variations on experiencing and understanding pride would also expand the study of pride.

SEE ALSO: ► Humility ► Self-esteem

## Proactive Coping

Ralf Schwarzer<sup>a</sup> and Nina Knoll<sup>b</sup>

<sup>a</sup>*Freie Universität Berlin, Germany;* <sup>b</sup>*Charité – Universitätsmedizin Berlin, Germany*

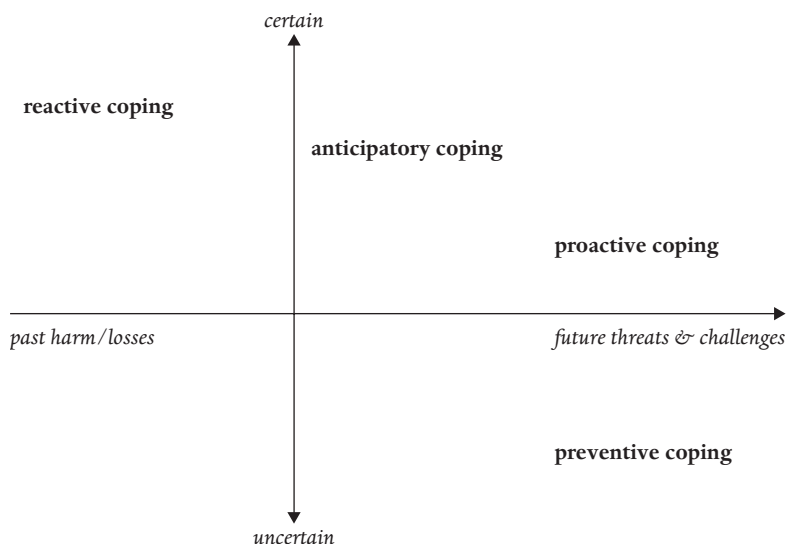
*Proactive coping* entails striving for more resources, desiring to maximize gains, and building up resistance factors either to ward off future crises or to grow and cultivate their capabilities for their own sake. Proactive coping's forward time perspective opens new research questions and helps to overcome traditional coping models that overemphasize the reactive nature of coping. There is a general trend to broaden stress and coping research by including *positive strivings* that were formerly domains of motivation and action theories. The notions of mastery, such as Baltes and Baltes' optimization, Lazarus' challenge and benefit, and Hobfoll's resource gain, are in line with proactive coping theories as proposed by authors such as Aspinwall, Greenglass, or Schwarzer.

The recent broadening of coping theory might be a reaction to earlier conceptualizations of coping that neglected goals, purpose, and meaning. As these become more salient and explicit in the current thinking, it is appropriate to redesign coping theory in order to extend it into volition and action theory. In line with ideas presented by Beehr and McGrath in the late 1990s, the present approach makes a systematic distinction between proactive coping and three other kinds of coping that might shed more light on some previously neglected aspects.

## Four Coping Perspectives as a Function of Timing and Certainty

Situational demands can be continuous or changing. They can reflect an ongoing harmful encounter, or they can exist in the near or distant future, creating a threat to someone who feels incapable of matching the upcoming demands with the coping resources at hand. For instance, critical events at the workplace may have occurred in the past, leading to layoff, demotion, or adverse restrictions. In light of the complexity of stressful episodes, coping cannot be reduced to either relaxation or fight-and-flight responses. Coping depends, among others, on the temporal perspective of demands and the subjective certainty of the events. Distinctions are made between reactive, anticipatory, preventive, and proactive coping. Reactive coping refers to harm or loss experienced in the past, whereas anticipatory coping pertains to inevitable threats in the near future. Preventive coping refers to uncertain threats in the distant future, whereas proactive coping involves future challenges that are seen as self-promoting (see Figure 6).

*Reactive coping* can be defined as an effort to deal with a stressful encounter that is ongoing or has already happened. Moreover, it might aim at compensation for



**Figure 6** Four Coping Perspectives as a Function of Timing and Certainty.

or acceptance of harm or loss. Examples are losing a loved-one, being diagnosed with a severe or chronic disease, failing an exam, or having been demoted. All of these events happened in the past with absolute certainty; thus, the individual who needs to cope has to either compensate for loss or alleviate harm. Other options might entail readjusting goals or searching for meaning. Reactive coping may be problem-focused, emotion-focused, or social-relation-focused.

*Anticipatory coping* can be defined as an effort to deal with imminent threat. In anticipatory coping, individuals face a critical event that will occur in the near future. Examples are speaking in public, taking a difficult exam, having to undergo painful medical procedures, anticipating increased workload, children moving out, a loved-one's severe illness, etc. There is a risk that the upcoming event may cause harm or loss later on, and the person has to manage this perceived risk. The function of coping may lie in solving the actual problem at hand, such as increasing effort, getting help, or investing other resources. Another function may lie in feeling good in spite of the risk, for example by redefining the situation as less threatening, by distraction, or by gaining reassurance from others.

*Preventive coping* can be defined as an effort to build up general resistance resources that result in less strain in the future (minimizing severity of impact), less severe consequences of potential distress, and an overall reduced risk of stressful events. In preventive coping, individuals face a critical event that may or may not occur in the distant future. Examples are anticipated job loss, physical impairment, disaster, separation, or poverty. The individual plans for the occurrence of such nonnormative life events that are appraised as threatening. Since all kinds of harm or loss could materialize one day, the individual builds up

general resistance resources, accumulating wealth, social bonds, and skills, “just in case.”

*Proactive coping* can be defined as an effort to build up general resources that facilitate promotion toward challenging goals and personal growth. In proactive coping, people have a vision. They see risks, demands, and opportunities in the far future, but they do not appraise these as threats, harm, or loss. Rather, they perceive difficult situations as challenges. Coping becomes goal management instead of risk management. Individuals are not reactive, but proactive in the sense that they initiate a constructive path of action and create opportunities for growth. The proactive individual strives for improvement of life or work and builds up resources that ensure progress and quality of functioning. For instance, proactively creating better work conditions and higher performance levels may be experienced as an opportunity to render life meaningful or to find purpose in life. Stress is interpreted as “eustress,” that is, productive arousal and vital energy.

Preventive and proactive coping are partly manifested in the same kinds of overt behaviors such as, skill development, resource accumulation, and long-term planning. However, the motivation can emanate either from threat appraisal or from challenge appraisal, which makes a difference. Worry levels are high in the former and low in the latter. Proactive individuals are motivated to meet challenges and commit themselves to personal quality standards. Self-regulatory goal management includes an ambitious manner of goal setting and tenacious goal pursuit.

The distinction between these four perspectives of coping is useful because it moves the focus away from mere responses to negative events toward a broader range of risk and goal management that includes the active creation of opportunities and the positive experience of stress.

## Proactive Coping: Assessment and Findings

Psychometric analyses have resulted in the Proactive Coping Inventory (PCI) which was constructed by Greenglass, Schwarzer, and Taubert in the 1990s. A preventive coping subscale is included in the PCI. Typical items are, “I plan for future eventualities,” and “I prepare for adverse events.” It also includes the Proactive Coping subscale that has been tested in various samples and that is available in several languages. Its 14 items form a unidimensional scale. Examples: “I visualize my dreams and try to achieve them”; “After attaining a goal, I look for another, more challenging one.” It has satisfactory psychometric properties, and there is growing evidence of its validity. Several studies have found that proactive coping is positively correlated with perceived self-efficacy and negatively with job burn-out in different professions. In 316 German teachers, the internal consistency of the Proactive Coping scale was  $\alpha = .86$ , and correlations were  $r = .61$  with perceived self-efficacy,  $r = .50$  with self-regulation, and  $r = -.40$  with procrastination.

Proactive teachers reported less job burnout as reflected by less emotional exhaustion, less cynicism, and more personal accomplishments than their reactive coping counterparts. Other recent work by Greenglass, Fisksenbaum, and Eaton, involving rehabilitation settings and addressing functional disability in the elderly, has also found positive effects of proactive coping, particularly on walking behavior and independence functioning and on feelings of vigor and vitality, emotions seen as important for psychological well-being.

The field of coping is becoming broader and now includes positive striving and emotions, goals, benefit finding, and search for meaning. Proactive coping theory is one example of a construct that embodies all of these dimensions. This theory builds upon Lazarus's cognitive appraisal approach and adds other dimensions to earlier work, including a temporal one. Moreover, proactive coping theory may be seen as bridging the gap between the construct of coping and those of action and volition. Extending the concept of coping to tenacious goal pursuit and personal growth offers a more comprehensive and precise depiction of human beings in their struggles and strivings. In light of daily obstacles and disappointments, one may assume that life is inherently stressful. Thus, *coping* becomes an appropriate label for behaviors that are over and above simple routines and habits. There may not necessarily be a concrete "stressor" that elicits coping behavior, as is depicted in the concept of reactive coping. Rather, self-imposed goals and visions may elicit opportunities and risks, and thus, the struggle for rewards and growth. Building a career or a house, writing a book, leading others to success, all represent situations with a continuous potential for the experience of stress. Use of proactive coping can be a valuable tool to improve one's quality of life.

SEE ALSO: ► Appetitive motivational systems ► Coping ► Self-efficacy

## Problem-Solving Appraisal

P. Paul Heppner,<sup>a</sup> Dong-gwi Lee,<sup>b</sup> and Yuhong He<sup>a</sup>

<sup>a</sup>University of Missouri – Columbia; <sup>b</sup>Yonsei University, Korea

*Problem-solving appraisal* refers to one's self-perception or assessment of his or her problem-solving skills, attitudes, and styles to resolve everyday problems as well as stressful life events. In line with positive psychology, which focuses on identifying and promoting human strengths that can help people live more fulfilling lives as well as buffer stress, an important way to facilitate or optimize the process of promoting human strengths involves helping people develop effective problem-solving skills. One of the important components of problem-solving that has been studied extensively in psychology is a person's problem-solving appraisal. To date, there are more than 120 empirical studies conducted on problem-solving appraisal, which provided strong support for a significant overlap between problem-solving appraisal and actual problem-solving skills.

## **Brief History of Applied Problem-Solving**

Psychologists have been interested in how people solve various problems for many years. Conceptualizations of the problem-solving in early literature include various learning, Gestalt, and computer-simulation approaches. In the 1970s psychologists began to divide problem-solving into two general categories, laboratory-type problems (e.g., water jar problems) and personal problems which often include emotional elements (e.g., difficult career choices). Intuitively, it made sense that people who had learned effective problem-solving skills would be more successful in a wide array of life tasks, and also would be psychologically adjusted. Researchers started identifying critical skills for helping individuals become more effective applied problem-solvers. Subsequently, more scholars joined in the study of how people solve real life problems and its implications for mental health issues and in helping professions. Conceptualizations of applied problem-solving in early literature include a constellation of relatively discrete, cognitive abilities or thought processes, and sequential models. For instance, researchers include Spivack and Shure who, in the 1960s and 1970s, studied interpersonal cognitive problem-solving skills such as problem sensitivity, means-ends thinking, alternative solution thinking, causal thinking, and consequential thinking. There was also the introduction by D’Zurilla and Goldfried of a sequential stage model (general orientation, problem definition and formulation, generation of alternatives, decision making, and verification). This model not only led to the development of problem-solving training interventions but also was used for conceptualizing psychotherapy activities. During the 1980s and 1990s, more sophisticated information processing theories were developed by researchers such as Anderson, which allowed further refinement of applied problem-solving models and training. For instance, at the beginning of the cognitive revolution in psychology, psychologists began to broaden the conceptualization of applied problem-solving not just in terms of the specific knowledge that individuals may apply directly to resolve problems, but with higher-order or metacognitive variables that affect how they will solve problems. In essence, an individual’s self-appraisal of his or her problem-solving ability was hypothesized to be a central component of applied problem-solving as well as linked to coping effectively with stressful life events. A great deal of research has subsequently supported this hypothesis.

## **Measuring Problem-Solving Appraisal**

A number of measures of applied problem-solving have been developed over the years, such as the Means-End Problem Solving Procedure, Problem-Solving Inventory (PSI), and Social Problem Solving Inventory. However, only the PSI is conceptualized as a measure of problem-solving appraisal. In addition, the PSI has been widely researched in over 120 studies across many countries, and is the most

widely used measure of problem-solving appraisal. The rest of this entry will focus on problem-solving appraisal as measured by the PSI.

The PSI aims to access individuals' perceptions of their problem-solving ability, style, behavior and attitudes. It consists of 35 items, each having six possible responses from *strongly agree* (1) to *strongly disagree* (6), with lower scores indicating positive problem-solving appraisal. A person taking this instrument would receive scores on the following three subscales: 1) *Problem-Solving Confidence* is defined as an individual's general tendency to believe and trust in one's problem-solving abilities, a self-assurance in a wide range of problem-solving activities. 2) *Approach-Avoidance Style* is defined as a general tendency to approach or avoid different problem-solving activities. 3) *Personal Control* is defined as a general tendency to believe in one's emotional and behavioral control while engaging in problem-solving. An extensive body of empirical research supports the reliability and validity of the inventory across a range of populations and cultures. The PSI is an easy inventory to administer. It typically requires 15 minutes for completion and can be easily scored by hand or computer. The readability level is at the 9th grade (an adolescent version with 4th grade reading level also is available).

## **Associations with Problem-Solving Appraisal**

Over 120 empirical investigations have been conducted on the relationships between problem-solving appraisal as measured by the PSI and psychological adjustment, physical health, coping, and educational and vocational issues. The literature suggests that peoples' application of their problem-solving capabilities is useful for understanding a broad range of human behaviors and that in general problem-solving appraisal is related to effective problem-solving skills as well as enhanced psychological and physical well-being.

### **Psychological Adjustment**

Since problem-solving was first claimed to be linked to psychological adjustment in the early 1970s, numerous studies have been conducted to examine the relationship between problem-solving appraisal and psychological adjustment, particularly in five areas: a) general psychological and social adjustment; b) depression; c) hopelessness and suicidal behavior; d) alcohol use/abuse; and e) personality variables.

### **General Psychological and Social Adjustment**

A positive problem-solving appraisal is related to positive self-concepts, greater locus of control, fewer personal problems, higher racial identity statuses in African American students, and better coping with grief experiences. In addition, it has been found that a positive problem-solving appraisal is associated with more advanced social skills, social easiness/trust, and more social support. Moreover,

there seems to be an important chain of events in that the more people attempt to solve their problems, the more confident they are as problem-solvers, and subsequently they report higher levels of psychological adjustment. Thus, a positive problem-solving appraisal is related to higher levels of general psychological and social adjustment.

### Depression

A more positive problem-solving appraisal is associated with lower levels of depression across a wide range of populations. For instance, a positive problem-solving appraisal in people such as college students, prisoners, patients with chronic low-back pain, adults with spinal-cord injuries, and a variety of cultures such as South Africa, Turkey, and China all reported lower levels of depression. In addition, a positive problem-solving appraisal seems to play a protective role with stress. That is, when people are under a great deal of stress, those who have a positive problem-solving appraisal experience less depression than those with a negative problem-solving appraisal. Thus, a positive problem-solving appraisal is associated with lower levels of depression, even when people are under a great deal of stress.

### Hopelessness and Suicidal Behavior

A positive problem-solving appraisal, particularly problem-solving confidence, is associated with fewer feelings of hopelessness and suicidal ideation across a variety of populations (e.g., college students, correctional inmates, psychiatric patients, outpatient suicide ideators and attempters). Problem-solving appraisal also seems to play a protective role in warding off hopelessness when people are under a great deal of stress. There also seems to be a chain reaction among problem-solving appraisal, hopelessness and suicidal ideation, such that those with a more positive problem-solving appraisal, even if they experience hopelessness, tend to have lower levels of suicidal ideation. Thus, a positive problem-solving appraisal is associated with people feeling more hopeful in their lives and experience less suicidal ideation.

### Alcohol Use and Abuse

A positive problem-solving appraisal is associated with less alcohol use and abuse. In addition, other research has found that there may be different drinking patterns associated with different components of problem-solving appraisal (i.e., those who lacked confidence but approached problems drank to enhance their mood, but those who lacked confidence and avoided problems drank to escape problems). Moreover, there is an interaction between alcohol abuse and parental drinking (i.e., students with more negative problem-solving appraisal and whose parents had more drinking problems reported more alcohol abuse).



### Personality Variables

A positive problem-solving appraisal is associated with less trait anxiety (even when under a great deal of stress), less trait anger, and more trait curiosity. Moreover a positive problem-solving appraisal (particularly problem-solving confidence), is associated with less worrying, a sign of anxiety. In addition, a positive problem-solving appraisal has been linked with a stronger sense of instrumentality or agency to handle normal daily events as well as stressful life events. Thus, problem-solving appraisal is related to a number of personality variables that are related to important psychological constructs.

### Physical Health

There is now a great deal of evidence that psychosocial factors have an important influence on physical health; problem-solving appraisal is one of those psychosocial factors that is related to physical health. Positive problem-solving appraisal is linked to positive health expectancies, more health promotion behaviors, as well as fewer health complaints about premenstrual and menstrual pain, chronic pain, cardiovascular problems, and health problems in general, particularly with clinical patients.

Additionally, a positive problem-solving appraisal is associated with fewer physical health outcome complications such as urinary track infections. Moreover, problem-solving appraisal is identified not only as one of the most successful measures to differentiate brain injured adults from controls (even over standard neuropsychological measures of problem-solving), but also the best predictor of community integration. Thus, there is an association between problem-solving appraisal and a range of physical health indices, which provides useful information about the role of psychosocial factors in positive physical health.

### Coping

Problem-solving appraisal is related to the manner in which people respond to stressful life events, whether they respond to resolving the problem itself (problem-focused coping) or whether they tend to primarily respond to their emotions (emotion-focused coping). A positive problem-solving appraisal was associated with the consistent report of actively focusing on the problem and attempting to resolve the cause of the problem. One probable explanation for this relationship has been that those people with a positive problem-solving appraisal who tend to engage in problem-focused coping also tend to assume responsibility for personal problems and attempt to cope actively. In addition, problem-solving confidence and approach-avoidance style appear to be the strongest contributors to problem-focused coping activities, and a sense of personal control was particularly related to disengaging, denial, and emotion-focused coping. People's strategies for seeking and using helping resources are also related to their appraisal

of the problem-solving skills. A positive appraisal is associated with more awareness of the availability of helping resources, higher rates of utilization, and more satisfaction with those resources. Similarly, when people seek counseling, those with a more positive problem-solving appraisal tend to report more positive outcomes in personal and career counseling.

### **Educational and Vocational Issues**

People's problem-solving appraisal is also related to a wide range of educational and vocational issues. For example, a more positive problem-solving appraisal is related to less test anxiety, test irrelevant thinking, and better study skills even in at-risk students, across different educational levels and ages. However, problem-solving appraisal is related to measures of intelligence and academic aptitude. In addition, problem-solving appraisal is positively related to vocational adjustment, such as vocational identity, more certainty in career decision making, and more knowledge of career choices and career planning. Thus, how people appraise their problem solving in general is related to how they approach a specific task, such as career decision making and vocational adjustment in general.

## **Problem-Solving Training Interventions**

In general, problem-solving training has involved teaching: a) specific components of problem-solving (e.g., problem definition skills, decision-making skills); b) a general problem-solving model; and c) specific problem-solving skills in conjunction with other interventions.

D'Zurilla, Nezu, and others have tried to enhance participants' problem-solving skills by teaching specific problem-solving skills associated within a specific problem-solving stage (e.g., decision making). Usually the training lasts 45 minutes. People in the specific problem-solving skills training group typically have outperformed those in the control group on brief tasks or inventories designed to assess the particular problem-solving stage (e.g., decision making). However, questions remain about the generalizability of such brief training to resolving complex and stressful real-life problems. Thus, other problem-solving training strategies have focused on teaching a general problem-solving model (such as the sequential-stage model), which usually includes didactics and practice in each of the stages over several training sessions, along with an applied integration step. This approach is effective with many populations (e.g., psychiatric patients) and target goals (e.g., substance abuse and addictions, depression, stress and anxiety). Teaching specific skills in conjunction with other interventions such as anxiety management, communication skills, or study skills often consists of one or more problem-solving component skills. Such training has been effective in a wide range of populations (e.g., academic underachievers, psychiatric patients) and target goals (e.g., depression, phobias, marital and family problems, cigarette smoking,

weight problems). In short, problem-solving training offers a great deal of promise to enhance people's strengths to lead more effective and meaningful lives.

## Future Directions

Future research and theory development could enhance our understanding of problem-solving appraisal and its role in psychological adjustment and coping. One promising direction may be to examine the construct in diverse populations (e.g., various U.S. racial/ethnic minority groups, people from countries other than the US, noncollege populations) and to distinguish between universal (*etic*) and culture-specific (*emic*) problem-solving appraisal. Another direction may be to examine the effect of individual components of problem-solving appraisal and the combination of the PSI factors (e.g., reporting being confident but avoiding problems) on people's development and life satisfaction. Finally, because we now know the connection between problem-solving appraisal and important life outcomes such as psychological adjustment and physical health, it is imperative that we train future generations to appraise their problem-solving capabilities positively.

SEE ALSO: ► Coping ► Hope ► Self-efficacy

## Promotion Focus

E. Tory Higgins  
*Columbia University*

Promotion focus is one of two distinct regulatory systems that has developed to deal with a distinct survival concern – nurturance. To survive, people (and other animals) need both nurturance and security; they need support or nourishment from the environment (often provided by others), as well as protection from dangers in the environment (social and physical dangers). When people succeed in satisfying a concern they experience pleasure, and when they fail they experience pain. Thus, both nurturance and security systems involve approaching pleasure and avoiding pain. However, the nurturance and security systems differ in *how* pleasure is approached and pain is avoided.

The nurturance motive is associated with the development of *promotion focus* which is concerned with accomplishment, with fulfilling hopes and aspirations (ideals). People can succeed or fail to fulfill their promotion concerns, and thus experience pleasure from success and pain from failure. But hedonic experiences are not the end of the story. There are distinct emotional and motivational consequences of self-regulation in a promotion focus.

Individuals with a promotion focus use ideal self-guides in their self-regulation. Self-guides are self-directive standards, which function as a major source of

people's emotions and motivation. They both directly prompt action as desired end-states (i.e., goals to be attained), and, through their use in self-evaluation (i.e., standards to be met), arouse emotions that are themselves motivating. Ideal self-guides represent a person's hopes, wishes and aspirations. Ideal self-guides vary in strength across persons (between individuals) and across situations (within individuals). There are different modes of socialization that produce strong ideal self-guides. Strong ideal self-guides are produced by interactions with significant others that involve bolstering and supportiveness, as well as love withdrawal for failure to meet an ideal self-guide. When self-guides are strong from socialization, they have high chronic accessibility. They predominate in self-regulation for years. When strong ideal self-guides predominate, people have a promotion focus on accomplishment and advancement.

When people are in the promotion focus system, they experience cheerfulness-related emotions following success (e.g., happy, joyful) and dejection-related emotions following failure (e.g., sad, discouraged). This is true whether people are in a promotion focus from a chronic predisposition to be in that system or from a current situation activating that system. Individuals in a promotion focus more readily appraise objects and events (e.g., exams, money, garbage, music) along a cheerfulness-dejection dimension than along a quiescence-agitation dimension.

Individuals with a promotion focus not only have a distinct emotional life, they also have a distinct motivational life. Importantly, they have distinct *strategic preferences* when they pursue goals and make decisions. Individuals in a promotion focus prefer to use *eager* strategies to pursue goals – strategies of advancement (a gain), which move the actor from a current neutral or satisfactory state (the status quo) to a more desirable state. Individuals in a promotion focus experience positive and negative events in the world as gains and nongains, respectively, because their concerns are about accomplishments and aspirations.

Strategic eagerness is also about ensuring gains and not wanting to miss gains, so eagerness sustains or fits a promotion focus. Indeed, many studies have found that individuals in a promotion focus prefer to use eager strategies to pursue goals or make decisions. There is also evidence that when the strategic approach to an achievement task is experimentally manipulated, individuals in a promotion focus perform better when instructed to use eager means than when instructed to use vigilant means. Persuasive messages with an eager tone (vs. a vigilant tone) are more effective in changing the attitudes of individuals with a promotion focus. The promotion focus on eager gains also influences how ingroup bias is displayed. For individuals in a promotion focus, ingroup members are treated with a positive bias ("promoting us") rather than treating outgroup members with a negative bias ("preventing them").

The fact that eagerness sustains or fits a promotion focus has other implications as well. It means that individuals with a promotion focus will be motivated to imagine or anticipate future success in order to create an eagerness in the present that will sustain their current motivation. Because of this, individuals who

are effective at sustaining their promotion focus are more optimistic than other people and have higher self-esteem. In addition, when they fail at a task they are less likely than other people to lower their expectations and, instead, continue to expect success the next time. After failure they will even raise their self-esteem if they need to remain eager for the next task. The higher self-esteem associated with individuals who have effective promotion has been found not only in the United States but also in other nations, such as in Italy, India, Israel, and Japan. Because extroversion also involves eagerness to meet new people and being enthusiastic, there is also evidence in each of these nations that individuals who have effective promotion behave in a more extroverted manner than other people.

Regulatory fit increases strength of engagement which intensifies evaluative reactions, and regulatory nonfit decreases strength of engagement which deintensifies evaluative reactions. This contributes to the emotional responses of individuals with a promotion focus. When individuals succeed in a promotion focus, it increases their eagerness, creating a regulatory fit that strengthens engagement, which is then experienced as high intensity joy. When individuals fail in a promotion focus, it decreases their eagerness, creating a regulatory nonfit that reduces engagement strength, which is then experienced as low intensity sadness. When failures become severe and prolonged, individuals with a strong promotion focus are vulnerable to suffering from dejection-depression, which is an extreme state of underengagement ("having no interest in doing things").

Regulatory focus differences in strategic approaches are especially likely to be revealed when there is a conflict between different choices or different ways to proceed on a task. One prevalent conflict is between being "risky" or being "conservative" when making a judgment or decision. When people are uncertain, they can take a chance and treat something as being correct that could actually be incorrect (a possible error of commission). Alternatively, they can be cautious and reject something as being incorrect that could actually be correct (a possible error of omission). Studies on memory, judgment, and decision making have found that, when the status quo is satisfactory, individuals with a strong promotion focus tend to more risky than other people. There is also evidence that individuals in a promotion focus are more creative than those in a prevention focus, and are also more willing to change and try something new when given the opportunity. Under conditions of uncertainty (and a satisfactory status quo), individuals in a promotion focus, compared to other people, are more willing to consider new alternatives and not simply stick with the established state of affairs.

There are other conflicts on which individuals in a promotion focus act differently than other people. One classic conflict on many tasks is between speed (or quantity) and accuracy (or quality). Compared to others, individuals with a promotion focus emphasize speed more than accuracy. A third conflict concerns whether to represent objects or events in a more global and abstract manner or in a more local and concrete manner. Compared to others, individuals with a promotion focus are more likely to represent objects and events in a global and

abstract manner (as well as more temporally distant) than in a local and concrete manner, whereas the opposite is true for those in a prevention focus.

SEE ALSO: ► Goals and goal theory ► Hedonics ► Prevention focus  
► Self-esteem ► Self-regulation

## Protective Factor

Ann S. Masten and Janette E. Herbers

*University of Minnesota, Twin Cities*

*Protective factors* are predictors of positive outcomes among people at risk for developing problems as a result of adverse life events or experiences. Interest in protective factors emerged in the context of research on resilience in the 1970s, as scientists began to search for explanations of unexpectedly good adjustment among individuals exposed to negative experiences. Initially, research was focused on identifying the qualities of individuals, their relationships, or other qualities in their environments that were associated with positive adaptation to risk or adversity. Eventually, research turned to deeper questions about how protective factors work and how to facilitate resilience by mobilizing protective processes.

Pioneering scientists recognized that protective factors represented important clues to resilience processes, with the potential to inform intervention. Early researchers, such as Norman Garmezy, Michael Rutter, and Emmy Werner, observed striking consistencies in the protective factors found across diverse studies of individuals who overcame significant challenges in their lives. Subsequently, this “short list” of protective factors would be corroborated many times across diverse studies of resilience.

## Widely Reported Protective Factors

The short list of protective factors for resilience in young people includes attributes of the individual, family, and neighborhood that are associated with positive adaptation in the context of risk or adversity. At the top of the list is an involved and competent parent figure or mentor. Effective parenting in the context of a close relationship with a caring and capable adult appears to be the key protective factor in the lives of young children undergoing adversity. As children grow older, close relationships with additional supportive people such as friends, romantic partners, and mentors also become more important. By adulthood, the protective factors based in relationships are often described in terms of social capital or social support.

Individual attributes strongly associated with resilience in childhood and adulthood include an array of cognitive skills related to problem solving and intelligent

behavior; motivation and self-efficacy related to achievement; and hope for the future, faith, and beliefs that life has meaning. Self-regulation skills appear to be crucial protective factors for children and adults as they overcome difficult times, including capabilities for controlling and directing one's own attention, arousal, emotion, and behavior in order to achieve goals.

Community-based protective factors include effective schools, resources such as health care, recreational centers, religious institutions and emergency services. As research on protective factors for midlife and aging adults expands, the list of protective factors in the community is also growing.

As research advances, there is more attention to the changing role of protective factors across development and also to the possibility that the same factor may be protective for one person at one point in time but not for the same person at another point in time or in a different situation. Similarly, the same factor may be protective for one person and not another, such as for a boy but not a girl in the same community. The importance of friendship as a protective factor increases across childhood; infants are not protected by close friendships (or their own cognitive abilities) in the same ways as older children or adults. It is also conceivable that the same personality characteristic, such as shyness, could create difficulties for a child entering school for the first time, yet serve to protect a young person from risky behavior in deviant peer groups during adolescence.

## **Distinguishing Protective Factors from Assets and Other Positive Factors**

As research on resilience expanded, it became evident that many of the protective factors associated with positive adaptation under risky or hazardous circumstances were the same factors that predict positive outcomes in general. Good intellectual skills and good parenting, for example, predict favorable development at all levels of risk or adversity. This observation led to a differentiation between factors that play a special role under negative or risky conditions and those that play the same role no matter what level of adversity is experienced. The terms *promotive factors* or *assets* are widely used to denote factors that are generally associated with positive outcomes, regardless of risk level, whereas the term *protective factors* denotes a special role when there is high risk or adversity exposure. Some factors function both ways. There is considerable evidence that good problem-solving skills and good parenting generally promote healthy development, but also that in very challenging life situations these factors play a particularly important role in protecting children from the worst ravages of adversity.

There also can be protective factors that *only* play a role when there is exposure to hazardous conditions, much like the airbag in an automobile or a vaccine that creates antibodies against specific infectious diseases. In communities, emergency social services, such as a crisis nursery or a domestic violence shelter, operate in this way.

## Vulnerability versus Protection

It has also been tricky to distinguish promotive and protective factors from risks and vulnerabilities, because many positive factors reflect underlying bipolar dimensions that have a positive and negative pole. It is often difficult to tell where the action is occurring, for example, when analysis indicates a moderating effect of a variable such as parenting quality on adaptive behavior. Ineffective parenting can function as a vulnerability or a risk factor for a child growing up in hazardous circumstances, just as effective parenting can function as a promotive or protective factor. In many cases, the role of the factor is probably occurring along a continuum, with effects extending from the negative to the positive.

## Research on How Protective Factors Work

Once the evidence on sets of protective factors associated with positive outcomes in the resilience literature began to accumulate, investigators were interested in understanding how protective factors work and also what could be done to facilitate the processes behind these factors. Answers to “How?” questions are crucial for designing effective programs and interventions to help people adapt well or recover in the face of adversity. Yet it is not easy to study how protection works during a crisis or following a disaster. One cannot randomly assign people to conditions that vary in hazards or protections. Instead, investigators have begun to design preventive interventions and programs on the basis of resilience models, attempting to reduce risk, boost resources, or mobilize powerful protective systems strongly implicated by research on protective factors.

Protective factors frequently implicated in developmental resilience research probably reflect powerful human adaptive systems that are the legacy of biological and cultural evolution. These basic adaptive systems include the attachment system and the family; the central nervous system as manifested in problem-solving, learning, and other aspects of adaptive behavior; religion and other cultural systems; the mastery motivation system; stress response systems; and other systems that humans engage in in the course of adapting to threatening, destabilizing, or traumatic circumstances. When these fundamental adaptive systems are operating normally, human individuals have considerable capacity for weathering the storms of life and recovering from temporarily overwhelming trauma. The greatest damage to human functioning and development occurs when catastrophic or cumulative experiences destroy, harm, or overwhelm these systems or their development in a lasting way.

The most powerful experiments to test resilience theory are intervention experiments to engage the power of these adaptive systems for resilience and ascertain whether positive change results from the intervention. Thus, experiments have been designed, for example, to improve the effectiveness of parenting for



children faced with bereavement or divorce, to provide a mentor or build self-regulation skills for highly disadvantaged children, to boost self-efficacy or school bonding for adolescents living in dangerous neighborhoods, or to recover a sense that life has meaning and hope in the future for survivors of war or natural disasters, all in an effort to mobilize protective processes for people undergoing adversity. Evidence is accumulating that it is possible to promote and prepare for resilience by boosting assets and protections in individuals, their relationships, and their environments.

## Emerging Research Directions

A fourth wave of research on resilience is now rising, characterized by integrative studies of resilience across levels of analysis, species, and disciplines. There is intense interest in the biology and neuroscience of protective processes and also in the possibility that protective systems affected by early adversity in development can be corrected or reprogrammed. At the same time, there is growing interest in protective systems beyond the individual, embedded in religion and other cultural traditions, organizations, ecosystems, information or communication systems, and the many other systems that humans interact with every day. There is increasing recognition, for example, that preparation for disasters requires a better understanding of how protective systems for human life work across many interdependent systems, from the level of individuals and families to the level of communities, nations, and global systems.

SEE ALSO: ► Attachment theory ► Developmental psychopathology  
► Resilience ► Self-regulation ► Werner, Emmy

## Psychological Adjustment

Cherisse L. Seaton

*University of Northern British Columbia*

In psychological research, *adjustment* refers both to an achievement or outcome as well as a process. As an achievement, *psychological adjustment* is a phrase used to denote positive mental health. The concept of positive mental health is detailed extensively in Jahoda's classic conceptualization and refers to an individual's state of mind and overall well-being. The process conceptualization of psychological adjustment reflects whether an individual is able to cope effectively with the demands of the environmental context as well as with the stress created by these demands. Thus, as a process, psychological adjustment reflects the relative adaptation of an individual to changing environmental conditions.

## The Dimensions of Adjustment in Research and Theory

Psychological adjustment is a popular outcome measure in psychological research, and often measures such as self-esteem, or the absence of distress, anxiety, or depression are used as indicators of adjustment. Researchers may also measure an individual's level of adjustment or well-being in response to some stressful event, such as divorce, or as the absence of deviant behavior, such as drinking or drug use. Although adjustment is a broad concept as well as an abstract construct by definition, it can generally be broken down into four major dimensions. The major dimensions include: 1) psychological adjustment as the absence of psychological symptoms (e.g., depression, anxiety); 2) psychological adjustment as normality, or the condition of the majority; 3) measures of well-being as indicators of positive adjustment (e.g., self-esteem, life satisfaction); and 4) psychological adjustment as an individual's characteristic level of positive adaptation (e.g., resilience, emotional intelligence). The first three dimensions of psychological adjustment refer to adjustment as an achievement (mental health), and the fourth dimension is a measure of adjustment as a process.

A great deal of psychological research has been dedicated to the assessment of adjustment as the absence of psychological symptoms over the century. In this area, researchers have studied a range of symptoms from clinical diagnoses of mental illness to recovering from stress. The presence or absence of depression is a popular indicator of psychological adjustment as well as the presence or absence of anxiety. Adjustment to stress-inducing life events, such as divorce, as well as the level of adjustment in groups considered to be disadvantaged (e.g., at-risk youth) are also commonly studied in mainstream psychology. However, defining adjustment or mental health as the opposite or absence of mental illness has disadvantages. For example, the definition of what constitutes mental illness is vague, and is subject to social and cultural standards. Jahoda suggested that the absence of mental illness may be necessary, but not sufficient to the construct of mental health and psychological adjustment.

The dimension of psychological adjustment as normality is apparent in research that defines adjustment as the absence of "deviant" behavior (e.g., drinking, drug use, gang membership). In this line of research, adjustment refers to how closely an individual conforms to statistical norms, and those who deviate from the norm are considered abnormal or maladjusted. The operationalization of adjustment as normality is often observed in research conducted in the health psychology field; for example, obesity reflects a marked deviation in weight from that considered to be normal for the individual's height and age. A low IQ relative to the majority is also considered a marker of abnormality, or poor mental health; however, in the dimension of psychological adjustment as normality, individuals who are doing extremely well relative to the population are also considered abnormal (e.g., those with abnormally high IQ scores). Another problem with this

operationalization is that norms are defined by culture; belief in witchcraft in present day North America would be considered abnormal, while in previous centuries such beliefs were normal and acceptable.

The dimension of psychological adjustment as well-being has been widely studied and more recently drawn under the wing of the positive psychology movement. Life satisfaction, for example, is a measure of subjective well-being and has been of interest to psychologists for years. Self-esteem has also been considered to be closely linked with adjustment and coping, and consequentially has been promoted in youth for years. An individual's current level of happiness, or positive affect, is also a measure of well-being.

Assessing adjustment as well-being alone also has drawbacks. For one, self-reported well-being is subject to social desirability. An individual may also be consciously unaware of and therefore unable to report his or her disturbance or mental illness. Likewise, individuals with severe mental illnesses may nonetheless report being happy and satisfied with their lives. Finally, subjective well-being is necessarily dependent on situation. A parent who has recently lost a child should not be expected to report happiness in response. Thus, the dimension of well-being may also be necessary but not sufficient to the construct of adjustment.

Emotional intelligence is one example of a concept that is used to assess characteristic levels of adaptation. Emotional intelligence consists of the ability to identify, express, understand, and regulate emotions in one's self and others and reflects individual differences in skills for handling emotion-laden problems. Overall, emotional intelligence is an underlying skill that promotes adaptive coping, greater adaptation to changing environments, as well as positive psychological adjustment.

Resilience is another construct that reflects positive psychological adjustment. Ego resiliency, in particular, reflects the strength or maturity of the ego in dealing with adversity.

Ego-resiliency refers to the dynamic capacity of an individual to modify a characteristic level of ego-control, in either direction, as a function of the demand characteristics of the environmental context, so as to preserve or enhance system equilibration. (Block & Kremen, 1996, p. 351)

Resilience is effective coping when faced with adversity and provides a protective buffer against the effects of stress, resulting in health benefits for the resilient individual. It is not that resilient individuals do not recognize conflicts (which would not be adaptive); they are just better able to adjust to or integrate negative events. For example, Tugade and Fredrickson reported that resilience did not predict the magnitude of participants' cardiovascular reactions to stress, but that resilient participants' cardiovascular activation returned to baseline faster following a stressful task. The concept of resilience overlaps that of psychological adjustment, as resilience reflects the ability to adapt or adjust to changing circumstances.

## A Theory of Positive Adaptation

The most comprehensive work to date, in the area of positive psychological adjustment, is Shelly Taylor's theory of cognitive adaptation. This theory holds that positive psychological adjustment following adversity involves finding meaning, regaining perceived control (mastery) and enhancing self-esteem. Meaning and mastery are often inseparable, as knowing the cause of the experience (e.g., believing that a high-fat diet causes cancer), allows an individual to feel he or she can control the experience (i.e., cancer can be prevented from reoccurring by changing diet). Individuals enhance their self-esteem by making downward comparisons, for example, by believing they are coping better than others whose condition is not as severe. It is evident that the concept of effective coping also corresponds closely to psychological adjustment or adaptation, as well as overlaps the concept of resilience.

## The Subtle Difference between Resilience and Flourishing

Researchers have been interested in the process of resiliency for a long time; however, the process by which individuals are able to flourish following adversity is not well understood. When an individual undergoes a traumatic experience or life-threatening event, it challenges their personal adjustment or adaptation. A traumatic experience brings into question an individual's worldviews, or their assumptions about the world (for example, the view that the world is just), and forces the individual to realize that he or she is fragile. Recovering from or adjusting to such an experience must involve one of two processes: the individual will either *assimilate* the trauma into his or her existing worldview or he or she will *accommodate* his or her worldview to accept the new information. For example, using assimilation, a person might reason that he or she personally caused his or her own traumatic experience (e.g., "I was attacked because I was walking too late at night in a dangerous neighborhood"). Perceiving the experience in this way allows the individual to maintain a sense of perceived control over his or her experience (i.e., he or she believe he or she can prevent it from happening again), as well as to maintain his or her worldview that the world is just. This is the process described by the theory of cognitive adaptation.

Conversely, an individual can change his or her worldview via accommodation. The process of accommodation can be either negative (e.g., "The world is unjust and random"), leading to feelings of helplessness and depression, or it can be positive (e.g., "Life is short, so I should enjoy each day as if it were my last"). Joseph and Linley argue that an individual can attain positive growth following adversity only through the process of positive accommodation, and that the process of assimilation will only lead to increased defense use and vulnerability to posttraumatic

stress disorder. The process of positive assimilation may allow an individual to be resilient in the face of adversity, but not necessarily experience positive growth, as positive growth requires the adoption of a new worldview. It is only via positive accommodation, and changing existing worldviews that an individual can truly transcend the event and flourish.

## **Criteria of Psychological Adjustment**

Several researchers have outlined criteria for psychological adjustment, including Jahoda's review of positive mental health, Ryff's dimensions of well-being, and Keyes and Lopez's more recent concept of "complete mental health." The criteria described by these authors are meant to better define the broad construct of mental health as well as to distinguish characteristics that may be necessary for psychological adjustment.

Jahoda outlined six criteria or approaches to the concept of mental health or adjustment: 1) an individual's attitude towards themselves; 2) an individual's level of growth, development or self-actualization; 3) an integration of personality or a balanced and flexible consciousness; 4) autonomy; 5) an accurate perception of reality; and 6) environmental mastery. Thus, according to Jahoda's criteria, in order to have positive mental health, an individual must have a positive and accurate view of him- or herself, be striving toward goals, be balanced, independent, not distort reality, and be able to successfully adapt to environmental demands.

Carol Ryff integrated several theoretical perspectives to generate six dimensions of psychological well-being and positive functioning. These theory-guided dimensions include: 1) self-acceptance; 2) positive relations with others; 3) autonomy; 4) environmental mastery; 5) purpose in life; and 6) personal growth. Thus, to be considered to have high psychological well-being, or adjustment, an individual must be accepting of both the positive and negative aspects of him- or herself and his or her past, be intimate and effective in human relationships, independent, competent in managing his or her environment, have goals and a sense of direction, be open to new experiences and see him- or herself as continually growing.

Keyes and Lopez's concept of complete mental health is currently the most integrated approach to psychological adjustment. In this model, complete mental health includes psychological well-being, emotional well-being, social well-being combined with low levels of mental illness. The concept of psychological well-being in this model is taken from Ryff's definition, described above. Emotional well-being is subjective well-being, such as happiness, life satisfaction and positive affect. Finally, social well-being in this model consists of five dimensions that indicate how well an individual is functioning in their social world. The dimensions are from Keyes' social well-being model and include: 1) social integration, or the sense of belonging; 2) social contribution, or one's value in society; 3) social coherence, or a perception of society that is organized and meaningful; 4) social acceptance, or positive attitudes towards others; and 5) social actualization, or the belief

in the potential of society. Keyes and Lopez's model comprises a four-fold typology, in which positive functioning (psychological, emotional and social well-being) and mental illness are two distinct dimensions. In this model, an individual who has both high well-being and low mental illness is considered to be flourishing, while an individual who has low well-being and high mental illness is floundering. Individuals with high well-being but high mental illness are deemed to be struggling, and those with low well-being and low mental illness are considered to be languishing.

## Measures of Psychological Adjustment

Although many outcome variables are employed as indirect assessments of an individual's adjustment (as discussed earlier), more direct measures have been developed as well. These measures typically employ a mix of mental health, well-being and positive adaptation or growth dimensions. For example, Ryff's Psychological Well-being Scales, which includes six subscales (positive growth, autonomy, environmental mastery, positive relations with others, purpose in life and self-acceptance), mirror her six theoretical dimensions of psychological well-being. Ryff's measure is a self-report instrument to which participants respond on a Likert scale. Keyes created a social well-being measure to assess the five dimensions of social well-being, and this measure, along with Ryff's well-being scales, and other measures of emotional well-being and mental illness are employed by Keyes and Lopez to capture their model of complete mental health. Other scales include the Crawford Psychological Adjustment Scale and more specific measures of adjustment, such as the Personality Adjustment Questionnaire, to measure psychological adjustment in children.

SEE ALSO: ► Adaptability ► Emotional intelligence ► Flourishing  
► Mental health ► Resilience

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## Psychological Capital

Mihaly Csikszentmihalyi and Jeanne Nakamura  
*Claremont Graduate University*

The concept of psychological capital emerged from three decades of research on flow, a state of complete experiential involvement in the activity at hand. In par-

ticular, the idea of psychological capital builds upon the prior concept of the “autotelic personality.” It was observed that some individuals were able to enjoy, or find flow in, even the routine and the difficult aspects of their lives, whereas others would report being bored or stressed. For instance, surveys conducted in the US and in Germany reported that about 15% of representative samples of the adult population in both countries reported never having experienced flow, whereas a similar proportion claimed to experience it every day, with the remainder reporting various frequencies between these two extremes. These and later studies suggested that there might be a trait-like disposition to achieve flow, or a subjective state that is “autotelic” (i.e., being its own goal), even when the external conditions were not conducive to it. This is what came to be called the *autotelic personality*.

It became apparent, however, that important as the concept of the autotelic personality was, it had its limitations. Because flow can be experienced in a variety of settings, some of which are undesirable – for example, extreme risk, or activities such as gambling that become addictive without providing positive developmental outcomes – the concept of the autotelic personality could not distinguish between people who were on a trajectory of positive personal growth, and those whose flow experiences in the moment were likely to lead to a developmental dead end.

Because of these considerations, the authors began to extend the idea of autotelic personality into a lifespan concept, and called the resulting construct *psychological capital*, or PK. We argued that the quality of our lives depends on the habits of attentional investment we develop. These attentional structures are the basic resources needed to access and interpret information. How we invest attention, and in what objects, will determine the experiences we have, and thus the quality of life. We call PK the ability to allocate attention so as to generate positive experiences in the present, and in ways that are likely to provide positive experiences in the future as well. Table 5 summarizes how various ways of investing attention result in different experiential outcomes. When a person is able to derive positive experiences from the moment, while at the same time doing something that is likely to improve the quality of experience in the future, that person is *forming psychological capital*. The ability to choose a desirable focus for one’s attention, and the ability to keep attention concentrated on desired objects, is what makes the building of capital possible. For a child, this means developing interests and focused curiosity as well as habits of attention that are likely to provide positive experiences in adulthood.

**Table 5**    Four Ways of Investing Attention.

		<i>Is the experience positive now?</i>	
		Yes	No
<i>Is it likely to be positive in the future?</i>	Yes	Capital Formation	Postponed Gratification
	No	Resources Consumed	Resources Wasted

Positive experience in the moment that is unlikely to provide positive experiences in the future corresponds to the process of *consuming* one's attentional resources. One might derive pleasure or even flow, but fail to add to one's meta-skills for enjoying experience. Many forms of entertainment provide immediate positive experiences without increasing the likelihood that the person will be able to enjoy future events.

The opposite situation obtains when the present activity is not positively experienced, but it promises to improve the quality of experience in the future – as is common in classroom learning or when practicing a difficult skill. As with any form of investment, future outcomes are not entirely predictable. In attentional as in financial investment the odds of having more positive returns in the future might be enhanced, but never assured. Thus *postponing gratification* could be a wise choice, but not necessarily the best: What if the years of boring preparation do not result in the expected positive outcomes? Much of the developmental research on self-discipline and self-regulation assumes that these processes require voluntary, effortful investments of attention that are experienced as difficult and tedious. But if one learns to enjoy an activity that promises to help us reach a distant goal, the effortful concentration required when we postpone gratification begins to turn effortless. This is the kind of process that leads to capital formation.

When neither present nor future provides enjoyment, one's limited opportunities to experience are truly *wasted*. Unfortunately, studies with the experience sampling method (ESM) suggest that many adolescents and young adults often feel that what they do is neither enjoyable now, nor is it likely to be so later. If such a condition persists through life, it threatens to deprive existence of its experiential rewards. In other words, the person who fails to derive enjoyment from the past as well as from the future will reach the end of life with nothing positive to show for it.

## Intellectual Context

The concept of psychological capital thus stands in instructive contrast to such well-established concepts as delay of gratification, and the associated developmental theories that chart the acquisition of impulse control. These lines of work are concerned with the future yield of acquired self-regulatory habits, but they do not focus on the yield in terms of present – or future – experiential rewards. In addition, much as the flow model has held implications for the nature and conditions of suboptimal experience, particularly the states of boredom and anxiety, we anticipate that the concept of PK will cross-fertilize productively with theory and research on pleasure and addiction.

The term psychological capital was chosen to highlight the parallel to a number of other characteristics that the social sciences have recognized as resources individuals possess in varying degrees, which yield returns in the future: economic



capital, or means of production; human capital, or credentials and expertise; cultural capital, or assets that derive from the symbolic culture (e.g., “taste”); and social capital, or relational resources. Organizational psychologist Fred Luthans and his colleagues have recently introduced a concept that they call *positive psychological capital* or PsyCap, to label a set of positive personality traits that have been shown to be assets in the workplace: hope; optimism; confidence or efficacy; and resiliency. Like PK, the concept of PsyCap attempts to identify personal resources that affect an individual’s capacity to take advantage of the other resources that he or she possesses.

What differentiates the present notion of PK from all of these other constructs, including PsyCap, is the fact that it is psychological in both its *nature* and *effect*. Whereas the other forms of capital derive their significance from the returns they provide in terms of productivity and material accomplishment, PK has its yield in enhanced subjective well-being.

## Directions for Future Research and Application

The shift from the concept of autotelic personality to the idea of PK opens up a number of directions for the future. The measurement of PK will entail assessing the psychological resources for: 1) regulating one’s own attention; 2) deriving rewards from present experience; and (3) investing attention in directions likely to yield experiential rewards in the future, as well. Research on autotelic personality has used the ESM to assess naturalistically individuals’ capacity to structure their own experience so that it provides subjective rewards. We anticipate that the quality of experience *in vivo*, and the way that individuals allocate attention in everyday life, will also be an ideal window on psychological capital. Among the many intriguing questions for future research and theory are: 1) the origins of PK; 2) the contributors to its development and deployment over the life course; and 3) the dynamics of its expression in interactions with the environment, both at the microlevel of attention regulation and at the more macrolevel of navigating the life course.

PK is most immediately relevant to scholarship addressing such developmental issues as self-regulation, resilience, and postponement of gratification. It promises to have substantial application to research in parenting, education, and preparation for adulthood. How psychological capital is best used in later life, and how it is passed down to future generations, open up new directions for research. Finally, the relevance of PK to psychology in general consists in pointing out that the main measure of a good life is not how much success a person has achieved, or how much knowledge, power, or material resources he or she has accumulated, but rather the quality of the experiences one has had over the course of life.

# Psychoneuroimmunology

Kathi L. Heffner  
Ohio University

## Definition and Historical Grounding

*Psychoneuroimmunology* (PNI) is the scientific study of bidirectional communication between the brain and immune system, and it is grounded in a fundamental health perspective linking mind and body. The domain of PNI research includes the examination of the nervous and endocrine system pathways mediating brain-immune communication, the psychosocial and behavioral factors that play a role in these nervous (neuro), endocrine, and immune system interactions, and aspects of physical, psychological, and social well-being that can be provoked, modulated, or attenuated by these processes.

In 1964, George Solomon first used the term *psychoimmunology* in what has become a landmark publication describing his theoretical approach to understanding relationships among emotions, immune functioning, and disease. In his 1980 presidential address to the American Psychosomatic Society, Robert Ader coined the term psychoneuroimmunology when summarizing research on the interactions among bodily systems that maintain health and their associations with social, psychological and behavioral factors. Although these moments were pivotal in formally defining the field, psychoneuroimmunology has historical roots in mind-body research dating back to the early half of the twentieth century. It was at this time that investigators began to observe associations among psychological, emotional, and behavioral characteristics and immune-related diseases such as allergy, asthma, rheumatoid arthritis, and infectious disease. These early studies paved the way for the brain-immune communication research subsequently advanced by Ader and Solomon, and by the mid-1970s two foci in psychoneuroimmunology emerged. As highlighted by Solomon's work, close attention to the role of emotion and stress in immune pathways contributing to health and disease grew. Concurrently, investigators in the tradition of Pavlov and led by Ader and Nicholas Cohen were investigating how the immune system could be conditioned to respond to non-pathogenic stimuli like sugar water and pain. These empirical traditions continue in PNI research and have grown to include the study of psychosocial factors related to resiliency of the immune system, as well as behavioral and psychological interventions that protect and strengthen immune function.

## The Immune System: Form, Function and Measurement

The immune system functions to defend our bodies against invading pathogens, like bacteria or viruses, and to assist with control of malignant disease, such as

cancerous cell growth. Thus, the first task of the immune system is to recognize *self* from *nonself*. This task is accomplished initially and primarily by cells termed *phagocytes*, which include cell-ingesting macrophages and neutrophils, by complement proteins that can destroy bacteria and help up-regulate phagocytes, and by natural killer (NK) cells which can destroy virus-infected cells, bacteria, and cancerous cells. Together, this first line of nonself recognition is referred to as *innate* or *natural immunity*, and is responsible for the generalized inflammation response to pathogens. A continued inflammatory response that is unable to resolve an infection will initiate the next phase of defense known as *adaptive* or *specific immunity*.

The adaptive immune response is characterized by the activation and proliferation (replication) of cells called *lymphocytes* that have receptors for specific pathogens. The lymphocytes primarily responsible for the adaptive response include cytotoxic T-cells, B-cells, and T-helper cells. Cytotoxic T-cells destroy infected or transformed cells. B-cells produce proteins called *antibody* that serve many functions, including tagging pathogens for recognition and destruction by phagocytes and preventing viruses from entering cells. There are two arms of adaptive immunity. The *cellular* arm is characterized by activation of the cytotoxic T-cells in response to intracellular viruses or bacteria, whereas the *humoral* arm is characterized by activation of B-cells to produce antibody in response to extracellular viruses, bacteria or parasites. T-helper cells produce chemical mediators called *cytokines* that coordinate the cellular and humoral responses to pathogens: the Th-1 subclass of T-helper cells produce cytokines associated with proinflammatory, cellular responses. Th-2 cytokines function to inhibit inflammation and activate the humoral arm of immunity. In general, natural immunity occurs quickly, is a generalized response to infection that does not require specific recognition of a pathogen, and requires less energy on the part of the organism; adaptive immunity follows natural immunity, results in the proliferation of cells and production of antibody that are specific to the pathogen, and requires more energy mobilization.

Measurement of the immune system entails the quantification of cell numbers, immune-relevant protein levels, and function of immune cells by immune assaying techniques. *Enumerative* immune assays provide basic measures of cell counts, that is, the numbers of immune cells in a sample of peripheral blood. Other assaying techniques provide quantification of levels of immune-relevant proteins in the blood, including cytokines and antibodies. *Functional* immune assays assess the performance capacity of cells. More commonly used functional assaying techniques provide measurement of proliferative responses of lymphocytes to foreign substances, the ability of NK cells to kill other cells, and cells' ability to produce cytokines in response to stimulation.

## Communication Pathways Between the Brain and Immune System

Although once thought of as an autonomously functioning system, the immune system is now known to communicate bidirectionally with the central nervous

system (which includes the brain and spinal cord) via the peripheral nervous and endocrine systems. These two systems operate in parallel in response to both infection and psychological stress. For example, as the activating branch of the peripheral nervous system, the sympathetic nervous system regulated by the hypothalamus in the brain has direct input – via neural pathways – into lymphoid organs (tissues that house lymphocytes and other immune cells). Activation of the sympathetic nervous system by pathogens, environmental threats or emotional states can stimulate lymphoid tissue to release immune cells into circulation. Immune cells also have receptors for norepinephrine that is released by the sympathetic nervous system when activated: Norepinephrine can affect both NK cell activity and lymphocyte proliferation.

In addition to activating sympathetic pathways, the hypothalamus controls aspects of the hormone-producing endocrine system. Much of the emphasis in psychoneuroimmunology has been on two regulatory endocrine pathways that support bodily responses to pathogenic and psychological challenges.

The first is the *sympathetic-adrenal medullary* (SAM) axis, which is responsible for the release of epinephrine (adrenaline) by the adrenal glands in response to sympathetic nervous system activation. Epinephrine, once in circulation, can quickly increase cardiac activity to help support immediate responses to threats. Epinephrine also has effects on lymphocyte function and trafficking, and in general, appears to have immediate stimulating effects on aspects of immune function.

Activated in parallel to the SAM axis during infection or environmental threat is the *hypothalamic-pituitary-adrenocorticotropin* axis. It is during activation of this axis that the hypothalamus releases corticotropin-releasing factor (CRF) which then stimulates the pituitary gland to release adrenocorticotropin hormone (ACTH). ACTH travels through circulation to the adrenal glands where it stimulates the adrenals to release glucocorticoids. Cortisol is the key glucocorticoid in humans. Cortisol can have powerful regulatory effects on the immune system by, for example, reducing the activity of lymphocytes and modulating inflammatory processes.

This brain-neuroendocrine-immune pathway includes feedback loops that create a system of bidirectional communication such that increases in hormones and other substances released via the endocrine and nervous systems are detected by the brain. The brain can in turn increase or decrease activity of the SAM and HPA pathways as necessary. Other aspects of immune function can also communicate with the brain to modify subsequent immune activity and, most intriguingly, can also interact with the central nervous system to affect behavior. Cytokines released by T-helper cells in response to infection interact with the central nervous system and signal to the brain the presence of immune activation. In this role, the immune system can serve as a sensory system communicating the status of the body to the brain. In response to increasing cytokine levels, the brain also activates behavioral systems that contribute to recovery from infection. These *sickness behaviors* that result can include social withdrawal, fatigue, and anhedonia (reduced pleasure). Understanding the role of the immune system in behavior has led to greater attention to neuroimmune mechanisms involved in links between disease, such

as cardiovascular disease or chronic pain, and mood disturbances characterized by sickness-related behaviors, such as clinical depression.

## **Psychosocial Factors and Immune Function: Focus on Stress**

Contemporary PNI inquiry has predominantly focused on relationships between stress and the immune system, with attention to the nervous (SAM) and endocrine (HPA) system mediators that coordinate stress responses which, in turn, interact with the immune system. A 2004 review by Segerstrom and Miller provides strong evidence for effects of distinct stressors on immune function. Generally, short-term, time-limited (acute) stressors appear to be associated with an upregulation of natural immunity, including redistribution of immune cells and mobilization of natural immunity in preparation for potential injury or infection, with a return to resting function at the conclusion of the stressor. These changes are seen as adaptive in the context of short-term fight or flight responses to acute challenges. Brief, naturalistic stressors, involving coping with a shorter-term real-life challenge, such as an academic examination period, are characterized by a shift in the Th-1/Th-2 cytokine balance from cellular responses to humoral responses. Studies of this shift help explain the increase in allergy and autoimmune disease in the context of stress. Finally, long-term, uncontrollable chronic stressors are related to overall suppression of immune system function, including reductions in lymphocyte proliferation and natural killer cell function. Research has linked global immunosuppression to chronic stressors such as caregiving for a loved one with dementia, unemployment, and clinical depression.

PNI's traditional emphasis on stressful negative events and states has begun to evolve toward understanding the individual factors that promote immune resilience in the face of threat. For instance, optimism, social support, and general positive affect are related to better immune function, although again, the emphasis has been on the role of these factors in promoting coping with stress. As such, evidence supports the likelihood that positive psychological and environmental factors protect the immune system through their attenuation of prolonged SAM and HPA stress responses. Similarly, intervention studies are helping to delineate the components of stress management, relaxation techniques, cognitive-behavioral and psychotherapeutic processes, and alternative and complimentary medical approaches that contribute to a strengthened immune system in healthy individuals, as well as those with immune-related diseases, including rheumatoid arthritis, asthma, and HIV.

## **Challenges for PNI**

Since the 1970s, burgeoning evidence has implicated psychosocial factors in immunocompetence, but much remains to be understood with regard to the

connection between psychosocial factors, the immune system and actual mental and physical health outcomes. Most support for this tricomponential relationship comes from distinct lines of evidence linking psychosocial factors to the immune system, and for relations among psychosocial factors and immune-related disease. The challenge for PNI researchers is to incorporate simultaneous, longitudinal measurement of psychosocial factors, neuroendocrine-immune parameters, and health outcomes, both positive and negative. Doing so will allow the field to more fully delineate the impact of social and psychological characteristics on physical and mental well-being, and the role of the neuroendocrine and immune systems in this important link.

SEE ALSO: ► Cortisol ► Immune system ► Neurobiology

## Psychopathology

Stephen Joseph

*University of Nottingham, UK*

Psychopathology is the study of the thoughts, feelings, or behaviors that are either distressing (feeling emotionally upset), dangerous (doing something that is harmful to ourselves or to another person), deviant (doing something that seems really odd or strange to other people), or dysfunctional (having difficulty functioning in our everyday lives), or a combination of these.

Although this sounds straightforward, defining psychopathology is problematic, and we must be wary always of how judgments of distress, dangerousness, deviance, and dysfunctionality are subjective and likely to vary cross-culturally and throughout history.

## Models of Psychopathology

Historically, psychopathology has been understood in many ways, the result of supernatural forces, the wrath of gods, demonic possession, for example, and at different times, psychopathology has attracted ridicule, fear, pity, anger, and been variously treated, from attempts to exorcise demons to taking cold baths. Within modern psychology and psychiatry there are seven major theoretical models, or paradigms, from which we can understand psychopathology. These are: biomedical model; psychodynamic model; behavioral model; cognitive model; humanistic model; transpersonal model; and sociocultural model. Each model provides us with its own boundaries of inquiry, a way of looking at the world, and a shared set of assumptions about reality. Each of these seven models presents a view of how psychopathology develops and how it can be prevented and treated. In brief, the biomedical model suggests that psychological problems are the result

of physical dysfunction; the psychodynamic model suggests that psychological problems are caused by conflict between unconscious forces; the behavioral model suggests that psychological problems are a result of maladaptive learning; the cognitive model suggests that psychological problems are caused by irrational or distorted thinking; the humanistic model suggests that psychological problems are caused by a failure to know and accept oneself; the transpersonal model is concerned with spirituality and experiences beyond the person; and the sociocultural model suggests that psychological problems result from social factors.

Most mental health professionals today would agree that human experience is so diverse that no one model of psychopathology is able to offer the full explanation for all psychological problems for all people all of the time, and current approaches attempt to adopt a biopsychosocial approach which understands the models as providing explanations at different explanatory levels and at different temporal etiological stages. For example, research suggests that people who are depressed have lower levels of social resources (evidence for the sociocultural model), particular negative patterns of thinking (evidence for the cognitive model) and lower levels of the neurotransmitter serotonin (evidence for the biological model) than people not suffering from depression.

## **Classification of Psychopathology**

*Psychopathology* refers to the study of a range of seemingly very different psychological conditions; thus one task of psychiatry has been to produce a classification system of various so-called psychiatric disorders, such as major depressive disorder, panic disorder, posttraumatic stress disorder, obsessive-compulsive disorder, anorexia nervosa, to name but a few of the more commonly known disorders described in the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM-IV). The DSM-IV provides psychiatrists, as well as others who use the manual, with a shared frame of reference, a common language, and a fundamental tool for scientific investigation into the causes and treatment of each of the various so-called disorders. This classification system has been influential and most modern textbooks on abnormal psychology are arranged around discussions of empirical evidence about what is known about the causes and treatment of each of the various psychiatric disorders.

## **Current Issues**

Although widely adopted, the classification of psychiatric disorders is however controversial. The current DSM-IV classification system is based on the underlying medical model assumption that psychological problems can be grouped in a way analogous to physical illness symptoms (i.e., by observing the symptoms people experience, what symptoms always seem to occur together, what symptoms do

not seem to occur together, a taxonomy is created) and that such a taxonomy is a necessary first step because each of the conditions will have its own specific etiology and treatment.

Taking a social constructionist approach, the classification of psychiatric disorders in DSM-IV is not an objective value-free task but one which is based on the medical model and an illness ideology that implicitly prescribes certain ways of thinking about psychological problems. First, it promotes the idea of dichotomies between normal and abnormal behaviors, between clinical and non-clinical problems, and between clinical populations and nonclinical populations. Second, it locates human maladjustment inside the person, rather than in the person's interactions with the environment and their encounters with sociocultural values and social institutions. Third, it portrays people who seek help as victims of intrapsychic and biological forces beyond their control, and thus leaves them as passive recipients of an expert's care.

Over the years, various theoretical alternatives to the DSM classification system have however been proposed from various quarters. For example, personality theorists such as Eysenck argued that psychopathology can be understood as combinations of extreme scores on factor analytically derived continuous personality traits, such as extroversion, neuroticism, and psychoticism; evolutionary psychologists have argued for the need to provide a taxonomy based on functional explanations; and humanistic psychologists such as Rogers have argued to reject the medical model, instead proposing an understanding based on an organismic growth model.

Debate around the scientific validity and ethical base of DSM and the search for alternative ways of thinking about psychopathology continues within the mental health system, and within the field of critical psychology. Critics such as Bentall and Boyle argue that traditional diagnostic-based approaches have failed to be of benefit to the vulnerable people in society.

## Positive Psychological Perspective

More recently, positive psychologists such as Maddux have also urged that we reconsider our underlying conceptions of psychopathology, pointing to how our understanding of psychopathology rests ultimately on social construction rather than empirical fact, thus raising questions as to whether psychopathology would be more constructively viewed as differing *only in degree*, rather than in kind, from normal problems in living; and whether psychological disorders are indeed analogous to biological or medical diseases, or rather if they are reflective of problems in the person's interactions with his or her environment. Positive psychology has been seen as the study of optimal functioning, in contrast with the traditional focus on psychopathology, but what becomes evident is that these need not be two separate domains of enquiry if the illness ideology of traditional psychology and psychiatry is rejected in favor of a positive psychological conception, such as the organismic growth model originally developed by Rogers, and more



recently applied to the study of posttraumatic stress by Joseph and Linley. In contrast to the medical model, a positive psychological conception of psychopathology seeks to explore the idea of continuity between normal and abnormal behaviors, between clinical and nonclinical problems, and between clinical populations and nonclinical populations.

SEE ALSO: ► Abnormal psychology ► *Diagnostic and Statistical Manual*  
► Mental illness

## Purpose in Life

Nicholas E. Pisca and David B. Feldman  
*Santa Clara University*

Scholarship on purpose and meaning in life spans centuries, religions, and world-views. The modern approach to these constructs, however, began with existential philosophers like Nietzsche, Sartre, and Camus. In general, existentialists concluded that it was impossible to determine life's meaning objectively. Thus, they reframed the age-old question "What is the purpose of life?" to reflect a more contemporary perspective – "How do people arrive at their own senses of purpose?" To echo this distinction, researchers still tend to use the term "purpose in life" rather than "purpose of life."

Of note, *meaning* and *purpose* have somewhat different connotations. According to Irvin Yalom (1980), "'Meaning' refers to sense or coherence. . . . 'Purpose' refers to intention, aim, function" (p. 423). Although some authors have suggested that purpose is only one aspect of meaning, these terms generally are used interchangeably.

## Definitions and Theoretical Foundations

Many theories of purpose in life have been developed. Due to space limitations, only four are included here. Viktor Frankl was one of the first to develop a psychological theory of meaning. At the core of his theory, called *Logotherapy*, is the "will to meaning" – the universal drive toward life meaning – which, when frustrated, can lead to mental illness. Based partially on his experience as a prisoner in a Nazi concentration camp, however, Frankl observed that life can have meaning in any situation. People find meaning through acting on three types of values: 1) creative values (by creating or producing something); 2) experiential values (by experiencing something, especially love); and 3) attitudinal values (through the attitude that one takes to situations).

A second approach to purpose, the *sense of coherence*, was developed by Anton Antonovsky. Believed to serve as a stress buffer preserving psychological

and physical well-being, the sense of coherence consists of three components. First, people must *comprehend* how their environments function. Second, people must believe that they can *manage* those environments so as to achieve their desires. Last, as people cope with the demands of their environments, they must believe that they do so for *meaningful* or worthy ends.

A third approach to purpose is *terror management theory*. Developed by Jeff Greenberg, Tom Pyszczynski, and Sheldon Solomon based on the work of Ernest Becker, this theory conceptualizes meaning as linked with culture and self-esteem. The theory begins with the premise that, as human beings, we must ultimately die – a prospect that could engender great anxiety. To avoid this, people cling to their cultural worldviews, most of which promise potential immortality. Through Christian culture, for instance, people who live up to cultural standards are promised immortality in heaven. Likewise, secular culture promises symbolic immortality in such forms as monuments, works of art, and children. When people meet cultural standards, they feel increased self-esteem and thereby are buffered against death anxiety. Terror management theory represents an important development, as it acknowledges the centrality of culture in meaning.

Roy Baumeister has developed a fourth theory that integrates concepts cutting across various other theories of meaning. He posits four needs for meaning. Notably, the first need is for *purpose*. That is, people have a need to see their current activities “in relation to future or positive states” or goals (Baumeister, 1991, p. 32). The second need, for *value*, consists of people’s desire to see their actions as right, good, or justifiable. Third, people have a need for *efficacy*, for a sense that they have control over events. Last, people have a need for *self-worth*; that is, they desire to see themselves as having positive value. Baumeister believes that when these needs are satisfied, a sense of meaning ensues. When unsatisfied, people show “signs of being thwarted – some frustration, malaise, discontent, or instability” (p. 47). This approach to meaning represents an important development because of its integration of research and theory on such diverse topics as goal striving, self-efficacy, and self-esteem.

## Measurement

Researchers have developed many measures of purpose in life with reasonable reliability and validity. The instrument most extensively used in research, the Purpose in Life Test (PIL), was developed by James Crumbaugh and Leonard Maholick to tap Frankl’s meaning construct. The PIL consists of 20 items rated on 7-point scales. An example item is “In thinking of my life, I . . .” with a scale ranging from 1 (*often wonder why I exist*) to 7 (*always see a reason for my being here*). However, the PIL has been criticized on psychometric grounds; some of its items appear to tap depression or life satisfaction rather than exclusively purpose in life.

The Sense of Coherence scale (SOC) consists of 29 items rated on 7-point scales, although short-forms also are available. Developed by Antonovsky, the SOC

is comprised of three subscales: comprehensibility, manageability, and meaningfulness. A sample meaningfulness item is “You anticipate that your personal life in the future will be:” with a scale ranging from 1 (*totally without meaning or purpose*) to 7 (*full of meaning and purpose*); a sample manageability item is “When you think of difficulties you are likely to face in important aspects of your life, do you have the feeling that:” with a scale ranging from 1 (*you will always succeed in overcoming the difficulties*) to 7 (*you won’t succeed in overcoming the difficulties*); and a sample comprehensibility item is “Do you have the feeling that you are in an unfamiliar situation and don’t know what to do?” with a scale ranging from 1 (*very often*) to 7 (*very seldom or never*).

John Battista and Richard Almond’s Life Regard Index (LRI) taps a meaning construct similar to that described in terror management theory. The LRI is a 28-item measure with two subscales. The framework subscale measures the perception that one has a structure or philosophy from which to derive life goals. The fulfillment subscale measures the perception that one is fulfilling that framework. Items are rated on scales ranging from 1 (*totally disagree*) to 5 (*totally agree*) and include “I have really come to terms with what’s important for me in my life” (framework) and “I feel that I’m really going to attain what I want in life” (fulfillment).

Although the aforementioned instruments are the most frequently used, Michael Scheier and his colleagues have recently developed the Life Engagement Test (LET) which is designed to assess life purpose. The LET measures the extent to which individuals are engaged with goals of personal value. The LET consists of 6 items rated on scales ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). An example item is, “To me things I do are all worthwhile.” This instrument represents an important development, as it systematically incorporates goal striving into a measure of life purpose.

Although most measures of purpose in life consist of closed-ended items, open-ended instruments have also been developed. Developed by Peter Ebersole and his colleagues, the Meaning in Life Depth instrument provides a standardized strategy for coding the depth of meaning present in respondents’ written descriptions of their life purposes. Roy Baumeister and Dan McAdams, among others, have also developed strategies for coding elements of meaning in research participants’ life stories.

## Relationships to Other Constructs

In contrast to the well-developed status of theory, empirical research on purpose in life is relatively sparse. Traditionally, purpose has been investigated within a pathology-focused framework. For instance, the PIL was developed in part to identify “pathological groups in contrast to ‘normal’ populations” (Crumbaugh & Maholick, 1964, p. 201). Research demonstrates that purpose and meaning inversely relate to depressive symptoms, anxiety, substance abuse, and suicidal ideation.

Purpose also has been shown to relate to positive psychology constructs including greater happiness, self-esteem, resilience, and hope.

Research findings on purpose in life and physical health are less consistent. Some studies show relationships between life purpose and perceived health, whereas others do not. Similar mixed results have been found for purpose's ability to predict mortality from medical illness. Perhaps because it was developed in part to predict health, studies utilizing the SOC in contrast to other measures tend to find positive results more often. Studies show that the SOC relates to blood pressure and cholesterol levels, glycemic control in diabetes, incidence of cancer, and functional status in Parkinson's Disease, among other variables.

## Promising Directions for Research

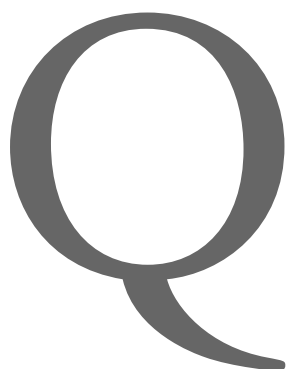
Although there undoubtedly are many profitable directions in which to take research, three are highlighted here. First, researchers are beginning to explicitly view purpose in life through the lens of goals. This certainly is not a new idea, but one that historically has been incorporated only obliquely into research. Snyder (1997) has suggested that purpose in life can largely be explained by the notion of *control*, which he defines as "a cognitive model whereby people strive to comprehend the contingencies in their lives so as to attain desired outcomes" (p. 48). Researchers such as Brian Little, Eric Klinger, and Robert Emmons have attempted to explain in greater detail how different goal constructs relate to life meaning. Although we doubt that purpose can be fully reduced to goals, this approach may provide a useful framework within which to understand meaning more deeply.

Another direction in which some scholars have begun to take work on purpose in life involves exploring the phenomenon from a societal or collective perspective. That human goal pursuits are affected by others and by culture is undeniable. Michael Lerner (1997) writes, "There are societal and psychological obstacles to our pursuit of meaning. . . . Meaning cannot be fully supplied by an existential choice . . . nor can it be fully supplied by service to society" (p. 29). Most research on life purpose within the field of psychology addresses the personal existential dimension of meaning but neglects the social or cultural aspects.

Finally, moving forward with research on purpose in life, there is a need for more studies with longitudinal and true experimental designs. Much of the extant research is either descriptive or correlational in nature, rendering it difficult to draw distinctions between the consequences versus causes of having a sense of life purpose. The issue of life's meaning has been of great concern to scholars for centuries. With such an overwhelming topic, it can seem daunting to perform empirical research. For this reason, purpose in life has often been avoided by those who consider it too "vague" or "philosophical" a topic. In the future, it will be important for positive psychology researchers to have courage and perseverance in investigating this difficult, often murky, but extremely rewarding issue.

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## Quality of Life

Tiffany M. Greene-Shortridge and Heather N. Odle-Dusseau  
*Clemson University*

Quality of life (QOL) has most often been defined as the assessment of one's own well-being and is affected by both physical and psychological health, as well as personal beliefs, social relationships, and relationships with salient features of the environment. Most researchers agree that the concept of QOL came about during the social indicators movement of the 1960s. This movement approached QOL as a population concern, such that QOL was looked at as the importance of objective and subjective indicators of social well-being. Objective indicators were represented by societal facts, such as health, poverty, and crime, whereas subjective indicators took into account the individual perceptions of societal conditions (e.g., job satisfaction, sense of safety, happiness, etc.). Currently, much more work is concentrated on the subjective indicators of QOL, or as some have coined this research, focusing on the eye of the beholder.

Here, we first concentrate on defining QOL, both as a population-level construct and an individual-level construct. We then examine the measurement issues that have resulted from QOL research, and explore what we consider to be valued measurements of QOL. Next, we summarize the literature on the indicators, or antecedents of QOL, and then introduce the major outcomes of QOL. We conclude with a section on future research for the field of QOL and provide insight for the QOL concept and practice. Throughout this entry we hope to provide the reader with a better understanding of the concept of QOL and its implications for individuals and society.

## Defining Quality of Life

Unfortunately, a uniform definition of QOL used by researchers across the board is lacking. Furthermore, while most researchers would agree that QOL is a multi-dimensional construct, the number of dimensions or a compilation of them has yet to be agreed. QOL is often used interchangeably with other constructs, such as subjective well-being or overall happiness. Nonetheless, most researchers have come to a consensus that QOL can be defined as a population-level construct *and* as an individual-level construct. Both of these dimensions of QOL are discussed next.

Concerning the definition of this construct at the population level, most researchers equate QOL to normative, objective components of peoples' experiences, such as income. On the other hand, QOL at the individual level is often addressed as the satisfaction that individuals have with their lives. Some researchers conceptualize these subjective and objective indicators of QOL as comprising a  $2 \times 2$  matrix, such that good objective living conditions and good subjective well-being comprise the highest level of well-being (i.e., the happy rich). However, if one has good objective living conditions, but poor subjective well-being, one can experience dissonance, which is characterized as having good living conditions, but being unsatisfied with life in general (i.e., the unhappy rich). If one encompasses bad objective living conditions, but has good subjective well-being, he/she may experience adaptation (i.e., the happy poor). In contrast though, if people experience both bad objective living conditions and bad subjective well-being, they are likely to experience deprivation (i.e., the unhappy poor). While this framework proposes a means to better define QOL overall, there still exist disagreements as to what conceptualizes the objective and subjective dimensions of QOL.

## Measurement Issues in Quality of Life

In accordance with attempting to define QOL, the measurement of the construct revolves around the approaches formerly mentioned. Hence, the first approach concentrates on objective indicators of QOL, such as economic and social indicators; examples of such include crime rates, literacy rates, life expectancy, and health care. Furthermore, research on social indicators has been conceptualized as being composed of four dimensions. These include security (e.g., crime rate, life expectancy), mastery (e.g., health, poverty rate), harmony (e.g., unemployment rate, income per capita), and intellectual autonomy (e.g., percentage completing college). One criticism of the objective measurement approach suggests that wealth is likely to explain a large part of differences in these social indicators. Nonetheless, in utilizing objective assessments, researchers are often able to make regional comparisons of QOL. The second approach to measuring QOL concentrates on the subjective assessments of well-being (SWB). In operationalizing QOL as a subjective construct, numerous assessment tools have been created. The

major focus of these instruments is on global assessments of well-being, as well as physical health.

Measures of QOL have been criticized for excluding important content domains, such as social and emotional realms. Furthermore, measures of QOL often fail to encompass a uniform theory of the construct, thus inevitably failing to show how QOL antecedents are often related to the outcomes of QOL. Additionally, QOL instruments have commonly included items that call for judgmental comparisons and causal considerations, as opposed to simply descriptive items that do not require assessment of causes or results. Finally, because QOL measures often focus on physical symptoms, researchers often find it difficult to compare across samples. For example, items are often specific to the symptoms experienced to particular samples (e.g., cancer patients), and are therefore inapplicable to healthy individuals.

In an attempt to alleviate these criticisms of QOL assessments, Kreitler and Kreitler developed a new, multidimensional measure. Great care was taken for the sample to be as heterogeneous as possible, which included individuals from multiple socioeconomic levels, and both males and females between the ages of 25 and 65. This sample varied in both health and types of sicknesses, stressful experiences, as well as educational and cultural backgrounds. In developing this new QOL measure, five dimensions were identified: physical functioning, emotional functioning, cognitive functioning, social functioning, and perceived coping. While this measure is relatively new, support has been found for both the reliability and validity of the measure within various samples.

Additionally, a comprehensive quality of life (ComQOL) scale was developed by Cummins and colleagues. The scale is made up of seven domains: material well-being, health, productivity, intimacy, safety, community, and emotional well-being. Each domain contains both objective and subjective items in order to measure one's overall QOL. Psychometric support for this measure has been found.

Frisch and colleagues have also developed the Quality of Life Inventory (QOLI), which seeks to measure life satisfaction and is suggested to be used in conjunction with Quality of Life Therapy. In combination, the QOLI and Quality of Life therapy are aimed at treating mental disorders and physical illnesses, as well as community social problems. Internal consistency and test-retest reliability has shown to be adequate for the QOLI.

Furthermore, the World Health Organization also has a Quality of Life group that has developed a measure which includes four QOL domains: physical health, psychological/bodily image and appearance, social relationships, and the environment. However, critics of this measure argue that it fails to include all content domains, items refer too often to physical symptoms, findings are often unable to be compared across sick and healthy samples, and the suitability of the measure restricts it to only assessing QOL as impaired by one's health.

While researchers and practitioners have attempted to define and measure QOL more effectively, there still exists a discrepancy among subjective and objective measurements, such that objective measurements of QOL and subjective estimates



of well-being are often found to be unrelated, and sometimes even contradictory to one another. Thus, it has been suggested that proponents of QOL ask themselves which side seems to be the most compelling, not necessarily which side seems to be correct.

## **Antecedents of Quality of Life**

Quality of life is typically measured in research as an outcome of multiple antecedences that are subjective and objective in nature. Bulbolz, Eicher, Evers, and Sontag's ecological perspective of QOL entwines subjective and objective indicators at the individual, family, community, and global level. At the individual or more personal level, objective indicators of health and subjective assessments of well-being predict QOL. At the interpersonal or family level, interactions and relationships with family members and close friends, as well as norms and obligations, are indicative of QOL. These two levels encompassing the personal and interpersonal indicators of QOL are referred to as the *microsystem*. Finally, the external and global "outer" levels are comprised of community and national indicators of QOL, such as income, housing, societal wealth, health, natural resources, and sustainability. Research concerning this model has found support for individual components of the ecological model. For example, the experience of role responsibilities in work, family, and social domains has been found to predict QOL. Additionally, the *amount* of responsibilities within multiple roles predicts QOL in both positive (benefits of being involved in multiple roles) and negative ways (stress of balancing multiple roles).

In addition to Bulbolz's and colleagues' ecological perspective on QOL, there are four other approaches that are often used in assessing predictors of QOL. The first of these includes utility, or one's overall mental state of pleasure or happiness, which is most often measured in terms of income. Needs is the second predictor of QOL and is usually measured by the degree or amount of resources one is able to provide in order to lead an acceptable life (in terms of nutrition, shelter, health and education). While less clear cut than needs, prudential values are the third predictor of QOL. These values do not encompass actual desires, but instead include one's informed desires, or desires that would make any human life better. Last, capabilities, or the freedom to pursue what one wishes to be or do in order to flourish as a human, comprise the last major predictor of QOL. Together, these predictors of QOL have implications for social action, subjective well-being, and human nature in general.

## **Outcomes of Quality of Life**

At the societal level, the major outcomes of high QOL are social capital and social cohesion. However, it is important to note that QOL should not predict maximal

social capital and social cohesion, but instead should predict optimal levels of these outcomes. Thus, too much or too little social capital and cohesion can lead to negative effects; instead, QOL should predict just the “right amount” of these societal outcomes. These two major outcomes of QOL are discussed next.

Unlike social cohesion, social capital is multi-dimensional in nature. Social capital encompasses society’s trust, reciprocity, values, and norms. Additionally, social capital is often broken down into two dimensions: bonding and bridging. Bonding encompasses the tight relationships between members within a group, while bridging refers to the networks between groups. Furthermore, social capital encompasses all other forms of capital as well (e.g., financial capital, economic capital, and human capital). While these forms of capital are usually individually based, taken together, they encompass a social capital. However, it is important to note that social capital only belongs to a collective group; it should never be used on an individual basis.

Unlike social capital, there lacks a clear operationalization of what social cohesion is. Indeed, some researchers refuse to offer a definition for social cohesion, but rather suggest that we explore different constructs and understandings to come to a better conclusion of what social capital could encompass. The construct of social cohesion can be traced back to Tonnies’ research in which QOL is thought to lead to family and peer group cohesion, as well as an increased societal structure. Today, it seems that most researchers would agree that social cohesion includes societal expectations and norms.

## Future Research and Concluding Thoughts

In the study of QOL, researchers are recommended to take into account the use and development of both objective and subjective assessments. While research has found that there are benefits and drawbacks to the measurement of each dimension, both allow for a better overall picture of the construct, and are assumed to be complimentary to each other. Additionally, if QOL researchers only use one type of measurement, it is advised that they clearly specify which QOL definition they are attempting to measure, as the field has yet to come to a consensus on a concrete operational definition. Moreover, we recommend that researchers continue to further validate the multidimensional nature of QOL, as well as concentrate on additional antecedents and outcomes of such. It is our hope that future research addressing these issues will allow for a more comprehensive approach to QOL that all researchers can use consistently.

SEE ALSO: ► Family quality of life; Quality of Life Inventory ► Quality of life therapy ► Well-being

## Quality of Life Inventory (QOLI)

Michael B. Frisch

*Baylor University*

The QOLI® or Quality of Life Inventory is an evidence-based positive psychology test of “psychometric soundness” (Biswas-Diener & Dean, 2007, p. 96) that is useful both in intervention planning and in outcome evaluation, that is, documenting positive outcomes that result from positive psychology interventions. In a study involving 3,927 clients, “the QOLI was found to be sensitive to treatment-related change in two samples and the predictive validity of the QOLI was supported in terms of its ability to predict academic retention in college students 1 to 3 years in advance” (Frisch et al., 2005, pp. 72–73). In a second independent review of the measure, Michael J. Lambert, Benjamin Ogles, and Kevin Masters (2006, p. 92) assert: “The most promising quality of life instrument available is the Quality of Life Inventory.”

The QOLI is published by Pearson Assessments – see [pearsonassessments.com](http://pearsonassessments.com) – the publisher of the Minnesota Multiphasic Personality Inventory (MMPI)-2 and the Millon Inventories; it may be ordered with the least expense by obtaining the “Hand-Scoring Starter Kit.” Because the QOLI is nonpathology-oriented and is relatively simple to use and interpret, a college degree is all that is required of those who wish to use the test in their coaching or therapy practice, etc.

The QOLI is a measure of life satisfaction or quality of life. It was intended to be a measure of *positive mental health* or life satisfaction based on a well-articulated theory which could augment or replace existing measures of negative affect and symptoms of disease or psychological disturbance such as those symptoms listed in the *Diagnostic and Statistical Manual*.

Based upon an exhaustive review of the literature in general, “cognitive mapping” studies of human concerns, quality of life and social indicators research, and studies identifying particular areas of life associated with overall life satisfaction and happiness a comprehensive list of human concerns, “domains,” or areas of life was developed and reduced to the 16 areas of life that make up the QOLI. These 16 items have been selected to include all domains of life that have been empirically associated with overall life satisfaction. Respondents rate how important each of the 16 domains is to their overall happiness and satisfaction (0 = “not at all important,” 1 = “important,” 2 = “very important”) followed by rating of how satisfied they are in the area (−3 = “very dissatisfied” to 3 = “very satisfied”). The importance and satisfaction ratings for each item are multiplied to form weighted satisfaction ratings ranging from −6 to 6. A “weighted satisfaction profile” akin to an MMPI profile (or an Un-MMPI profile of health; see Figure 7) is generated which gives a comprehensive overview of clients satisfaction in 16 areas of life (weighted for each area’s importance to the respondent). The overall life satisfaction is then computed by averaging all weighted satisfaction ratings with nonzero

importance ratings; the total score thus reflects one's satisfaction in only those areas of life one considers important. Respondents can also indicate what problems interfere with their satisfaction in each area on a narrative section of the QOLI test booklet. Figure 7 shows a portion of a QOLI profile – without the accompanying interpretation and without the client's listing of problems that interfere with their satisfaction in each area of life.

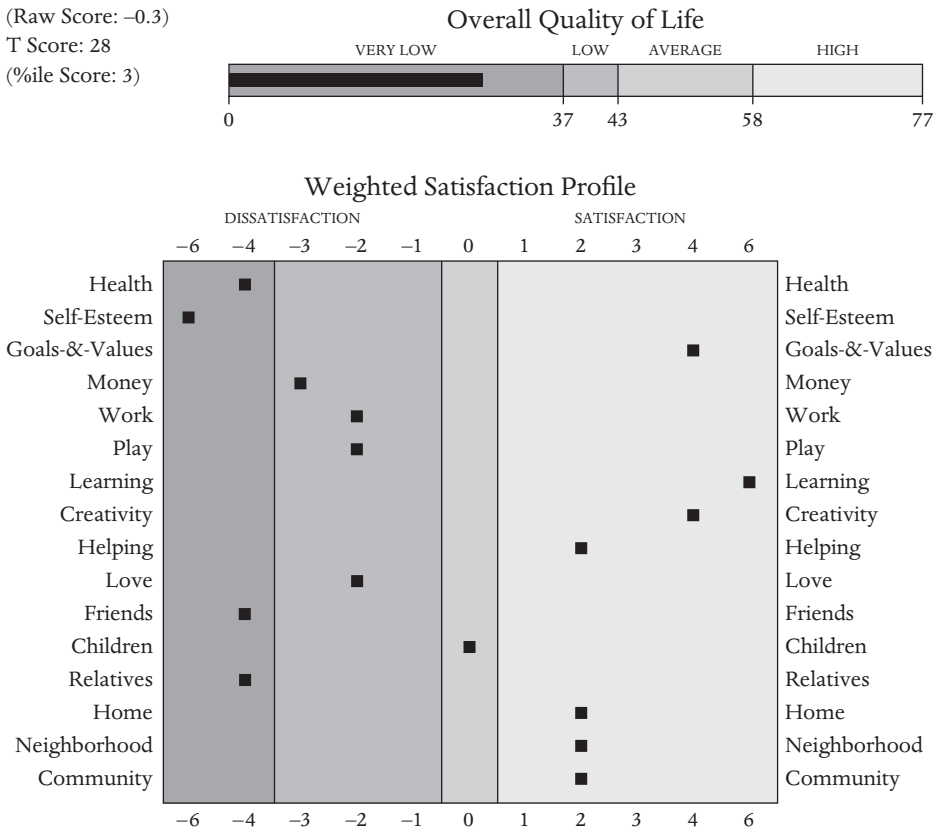
QOLI<sup>®</sup> Profile Report  
07/13/2005, Page 2

ID: 12345

## INTRODUCTION

The Quality of Life Inventory (QOLI) provides a score that indicates a person's overall satisfaction with life. People's life satisfaction is based on how well their needs, goals, and wishes are being met in important areas of life. The information in this report should be used in conjunction with professional judgment, taking into account any other pertinent information concerning the individual.

(Raw Score: -0.3)  
T Score: 28  
(%ile Score: 3)



**Figure 7** QOLI Profile Report.

Source: Pearson Assessments – see [pearsonassessments.com](http://pearsonassessments.com)

## Use of the QOLI in Documenting Outcomes, Planning Interventions, and Fine-Tuning Interventions

A QOLI profile such as this yields an overall score useful in demonstrating that a client has moved into the average range or above in quality of life or life satisfaction after a positive psychology intervention. A QOLI weighted satisfaction profile, as in Figure 7, may also help in intervention planning by suggesting strengths or areas of satisfaction in the white area of the profile on the right, while showing valued areas of dissatisfaction on the left side of the profile in gray. These gray areas may be listed as targets of intervention, with the larger negative numbered items considered the most serious and in need of intervention.

SEE ALSO: ► Quality of life ► Quality of Life Therapy

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## Quality of Life Therapy and Coaching (QOLTC)

Michael B. Frisch

*Baylor University*

Quality of Life Therapy and Coaching or QOLTC is a comprehensive and evidence-based approach to positive psychology intervention. Clients are given tools for boosting satisfaction and fulfillment in any one of 16 *specific* areas of life in order to enhance *overall* contentment or quality of life. These areas include: life goals-and-values; spiritual life; self-esteem; health; relationships with friends; partner; children and relatives; work; play; helping; learning; creativity; money; surroundings–home; neighborhood; community; and relapse prevention. While quality of life coaching is aimed at nonclinical populations who wish to be happier and more fulfilled, quality of life therapy teaches therapists and clinicians how to integrate the latest in positive psychology into their clinical practice.

Quality of life coaching and therapy is evidence-based in so far as this package of interventions has been evaluated as successful in two separate trials conducted

at different laboratories with different clients, that is, a coaching sample from Beth Israel Medical Center in Boston and a clinically depressed sample at Baylor University. For example, in a randomized controlled trial, Rodrigue and his colleagues (2005, p. 2430) conclude: "Quality of Life Therapy leads to significant improvement in quality of life, mood disturbance, and social intimacy. Second, improvements in quality of life and mood appear to be maintained for as long as 3 months. Third, while supportive therapy/treatment as usual appears to yield some short-term benefits in mood, Quality of Life Therapy is a more effective treatment overall." Other grant-supported randomized controlled trials of QOLTC are currently underway. The evidence-based Quality of Life Inventory (QOLI) is also a part of quality of life therapy and coaching where it is used to plan interventions, identify areas of strength, and scientifically measure the effect of intervention by showing if clients' overall scores move into the average or normal range of life satisfaction for a nationwide sample of adults that approximate the US Census in ethnic composition. Psychometrically speaking, in a study involving 3,927 clients, "the QOLI was found to be sensitive to treatment-related change in two samples and the predictive validity of the QOLI was supported in terms of its ability to predict academic retention 1 to 3 years in advance" (Frisch et al., 2005, pp. 72–73). Finally, as part of an independent assessment of the approach, Ed Diener (2006) evaluates quality of life therapy and coaching as "research-based," "science based," "comprehensive," and representative of the "state of the art" in positive psychology today (pp. vii–viii), while Christopher Peterson (2006) states that "Quality of Life Therapy and Coaching is psychology at its best – theoretical and practical" (back cover).

The quality of life theory which undergirds the approach attempts to integrate the findings from the fields of positive psychology, coaching, well-being, life satisfaction, happiness, quality of life and social indicators research, psychotherapy, and Beck's cognitive therapy. The theory itself is practical, serving as it does as the basis for the five paths to happiness or CASIO intervention applicable to any area of life. The theory attempts to integrate the latest in positive psychology and 30 years of quality of life research with Aaron T. Beck's and David A. Clark's latest cognitive theory of psychopathology and depression. In fact, David A. Clark authored a second foreword to the book *Quality of Life Therapy*, which constitutes an intervention manual for conducting quality of life therapy and coaching.

Quality of life coaching and therapy begins with an assessment of life goals and quality of life using the QOLI or similar instrument and the Three Pillars of Quality of Life Therapy and Coaching. Clients do well to begin any positive psychology intervention program with a modicum of self-care or "inner abundance" such that some basic physical and emotional needs are being met. Without this physical or emotional reserve, clients will often feel too tired or overwhelmed by the demands of the moment to try to build a better quality of life. Fostering inner abundance in clients is the first pillar of QOLTC.

Inner abundance means feeling deeply calm, rested, centered, loving, alert, and ready to meet the challenges of your day and your life after caring for yourself

in a thoughtful, loving, compassionate, and comprehensive way. When you do the very best for you, there is a lot more of you available for other people and activities. We must feel centered, calm, and good on the inside – hence the “inner” of inner abundance – to serve others or to find fulfillment in any of the 16 areas of life in quality of life therapy and coaching. We need a modicum of self-care – both physical and emotional – or self-maintenance so that we have the energy, clarity, wisdom, and calmness to identify and pursue our most important life goals, including service to others.

Finding meaning in life, the second of the Three Pillars in QOLT/C, helps clients to articulate goals for each valued area of life. Finally, clients benefit from “quality time” or periodic times for rest, reflection, and problem-solving in their quest for greater fulfillment. Quality time is the third pillar of quality of life therapy and coaching. Clients are introduced to the Three Pillars at the same time that they begin to try interventions associated with the 16 areas of life that make up quality of life coaching and therapy.

SEE ALSO: ► *Quality of Life Inventory*

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# R

## Rehabilitation Psychology

Timothy R. Elliott<sup>a</sup> and Gitendra Uswatte<sup>b</sup>

<sup>a</sup>*Texas A&M University*; <sup>b</sup>*University of Alabama at Birmingham*

Rehabilitation psychology is committed to the development and application of psychological knowledge and services to promote the health and well-being of individuals who live with disabling conditions. The specialty has been historically linked with institutions that serve individuals who have disabling conditions (including hospitals, schools, universities, nonprofit organizations, and federal and state agencies). Rehabilitation psychologists, therefore, have actively participated in multidisciplinary service and research endeavors, program development and evaluation, administration, policy formation, advocacy, and training. Rehabilitation psychology was originally construed to serve those who encounter “deprivation and disability” that devalued their role in society in any fashion (including institutionalization, racism, poverty, older age, and chronic disease; Dembo, Diller, Gordon, Leviton, & Sherr, 1973, p. 719). However, the specialty is typically associated with the provision of psychological expertise on behalf of persons with congenital or acquired physical, neuromuscular, and developmental disabilities.

## Historical Context and Development

Many psychologists, educators, and counselors responded to federal legislation to assist workers injured in the early twentieth century during the industrialization of the American working environment. The general thrust of this legislation and accompanying programs was directed toward compensating injured workers who could not return to their jobs, and to study work-related accidents to determine



preventative measures. These efforts were complimented and expanded by legislation to assist soldiers injured in World War I and World War II. Legislation following World War II, in particular, was highly influential in addressing the psychological issues of personnel who incurred permanent disabilities.

These policies and programs addressed the psychological, vocational, educational and medical issues germane to the individual who had acquired a disability. Rehabilitation psychology gained prominence at this time, and psychologists inspired by Lewinian field theory were influential. Beatrice Wright and Tamara Dembo recognized the environmental and social factors that defined and characterized disability. Collaborating with other invested colleagues (including many notable social, clinical and counseling psychologists of the day), they received support from federal agencies and the American Psychological Association to convene and define the initial parameters of rehabilitation psychology.

## **Theoretical Foundations**

Wright and Dembo advanced the premise that behavior associated with disability was best understood within the classic Lewinian equation,  $b = f(p \times e)$ . From this perspective, psychologists were to appreciate how characteristics of everyday situations impose disability vis à vis architectural barriers, negative and stereotypic attitudes, limited access, and lack of information. These factors limit opportunities and options and prompt behavioral reactions that are invariably interpreted by observers in a negative fashion and attributed to the presence of the disability. Wright furthered this perspective in the classic *Physical Disability: A Psychological Approach* in 1960, in which core “strengths” of rehabilitation psychology were proposed. These strengths – including somatopsychological relation, individuation, the insider-outsider distinction, and the recognition of assets – perpetuated the value of recognizing the individual (rather than the “diagnosis” of a disability), and an appreciation for abilities and assets of the individual and the need to identify personal goals of the individual. Wright also augmented these strengths with an explicit delineation of values inherent in rehabilitation psychology research and practice. Thus, the roots of rehabilitation psychology orient the field toward examining the strengths of individuals with disability and growth toward personal goals.

## **Growth and Evolution**

The growth of rehabilitation psychology was stimulated by counselors who advanced vocational rehabilitation, by social psychologists who studied the mechanisms associated with stigma, and by psychologists who provided clinical services in medical settings to individuals who had incurred physical and neuromuscular disabilities. Rehabilitation psychologists seized the initiative to develop appropriate norms and psychometric properties of many psychological instruments that were

otherwise unsuitable for use with individuals with sensory or physical limitations. Wilbert Fordyce relied on an operant perspective to understand further how environmental factors can shape and reinforce “disabled behavior” and behavioral strategies were successfully integrated in rehabilitation programs for persons with chronic pain conditions. Other psychologists used behavioral paradigms to understand psychophysiological processes that could be targeted in self-regulation strategies for persons with disabilities (e.g., biofeedback). More contemporary research has demonstrated the utility of cognitive-behavioral processes in the prediction of adjustment, health and well-being of individuals with disabilities. Cognitive-behavioral strategies are often utilized by rehabilitation psychologists. Rehabilitation psychologists have worked in federally-funded collaborative studies that mandate data-sharing across medical institutions to further understanding of the health and social needs of people with severe yet low-incidence disabilities. These systems have played a pivotal role in measuring and predicting the quality of life for individuals with these conditions.

## **Issues and Problems**

The early pioneers of rehabilitation psychology envisioned a broad scope for the field that could accommodate psychologists from various psychological specialties. The emphasis on shared core values and beliefs, as espoused in the influential works of Wright and Dembo, were deemed central to the field. As opportunities grew in the clinical rehabilitation setting substantially in the recent decades, the job demands were met by psychologists with backgrounds in clinical health psychology and neuropsychology who had little exposure to the field theory perspectives of Wright and Dembo. Clinicians achieved a great milestone when the American Board of Professional Psychology recognized rehabilitation psychology as a board specialty. With this specialization, however, the possible gaps between problem-oriented practice – a long-standing target of rehabilitation psychology pioneers – and the values of disability rights community may have widened. In an influential body of work, Olkin and colleagues decried the relegation of disability issues to the realm of rehabilitation psychology (as a specialty discipline perceived to be wedded to a traditional medical model), and urged professional psychology to recognize disability issues as a matter of diversity that should be addressed in every APA-accredited training program. This view, which is largely informed by scholarship (and activism) associated with the interdisciplinary field of disability studies, has also advocated an affirmation approach to counseling with individuals with disabilities. The basic principles of affirmation therapy recall many of the original values of Wright and Dembo.

Current health care service delivery systems and shrinking federal and state budgets have placed considerable financial restrictions on rehabilitation therapies, generally. Consequently, interventions that have demonstrated effectiveness but are labor-intensive – such as supported employment techniques (which uses on-site

job coaches to return persons with severe disabilities to work) and constraint-induced movement therapy (which features physical therapies to enhance motor function to limbs affected by stroke) – encounter difficulty in receiving reimbursement for services.

## **Future Directions in Practice and Research**

Contemporary trends in health and health service delivery provide many unique opportunities for the advancement of rehabilitation psychology values and principles. For the first time in the history of the United States, over 45% of the population now lives with a chronic health condition (and other estimates place this figure over 50%). The health and well-being of individuals with these conditions are ultimately determined by behavioral and social mechanisms that are addressed in rehabilitation psychology. Moreover, the primary model for understanding chronic conditions advanced by the World Health Organization – the International Classification of Functioning, Disability, and Health (ICF; WHO) – defines disability by the environmental and social factors that limit ability and impose limitations in a fashion consonant with the original ideals promoted by the founders of rehabilitation psychology. The ICF de-emphasizes the explanatory utility of a medical diagnosis, and compliments alternative service models that promote independent living, improved access to institutions, and improved role functioning and mobility to reduce disability across the dimensions in the WHO model.

To promote the health and well-being of community-residing persons with disability, it is essential to form collaborative partnerships between these individuals and health service providers so that appropriate community-based services and ongoing access to information and support are available (and this will likely include an increased use of long-distance technologies to circumvent mobility problems). A greater emphasis is now placed on health promotion programs for individuals with disability. Similarly, the effective and strategic provision and usage of assistive devices and enhanced computer technologies to improve function will involve rehabilitation principles; virtual reality technologies may very well expand rehabilitation therapies to individuals who might otherwise have restricted access to traditional therapies (in-home mobility, driver training).

Theory-driven psychological research continues to inform interdisciplinary practice; behavioral neuroscience now demonstrates that physical therapies may work in informed, concentrated ways to improve function and mobility, and possible neural growth. Contemporary models now acknowledge the essential and subjective role of the individual in a manner that can accommodate the study of other assets and character strengths. To demonstrate the effectiveness of novel interventions and services, researchers will have to find ways to integrate qualitative measures in mixed-model designs, and the current emphasis on randomized clinical trials may be frustrated by the real-life difficulties of recruiting sufficient numbers of individuals with low-incidence disabilities while minimizing volunteer

biases (and to approximate meaningful control groups). These methodological problems may necessitate intervention studies to incorporate sophisticated analyses available for single-case designs, and greater familiarity with program evaluation and participatory action methods.

Some of these developments, the affirmation of the Lewinian model of disability by the ICF and the increased emphasis on health promotion, may guide the field back to the roots laid down by Wright and Dembo and increase interest in applying positive psychology approaches to challenges that individuals with disability face. Examples are interventions that enhance the health and well-being of families that live with chronic health conditions and individuals with disability and studies of character strengths that enhance the relationship between the individual with disability and other family members.

SEE ALSO: ► Environmental resources ► Family quality of life  
► Four-front assessment approach ► Self-determination

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## Relaxation

Tamara Coder Mikinski  
*University of Kansas*

Relaxation, a state of rest, recreation, and restoration, is vital to emotional, physical, and intellectual health. Individuals who are accomplished at relaxation are masters of the mind-body connection. They are able to promote health, mental acuity, and positive affect through highly personal and satisfying activities or states of being. Being relaxed is not an optional human condition. It is crucial to life and without the most universal form of relaxation, *sleep*, a person becomes at first tired and cranky, then unable to concentrate or make good decisions, and finally will evolve into a psychotic state. Relaxation is not only a personal value but also a cultural one. Psychologists are actively involved with the creation and maintenance of relaxed states through their clinical work.

## Physiological Relaxation

The human heart knows relaxation. If our heads followed the heart muscle's pattern of total contraction followed by total relaxation, there might be fewer stress-

related health problems. However, our bodies are wired at the most basic level for fight or flight. During an aroused state, our muscles tense, endorphins course through our systems, and we are in a heightened state of alert. When our safety is threatened, such activation is life-saving. However, when we adopt a prolonged state of arousal, there are unhealthy ramifications. Extended periods of stress without bouts of rejuvenating relaxation have been linked with high blood pressure, increased cortisol levels, muscle tension, gastrointestinal difficulties, and psychological distress.

Individuals who aspire to a balanced and healthy life build daily physical relaxation into their schedules. It is not an option; it is a necessity, habit, and pleasure that is greatly missed when it does not happen. Many individuals seek relaxation through physical exercise such as sport, working out at a gym, or through an activity like yoga which combines physical movement, mental engagement, and meditative states. Physical relaxation is highly individualized. What is pleasurable for one person can be boring or unpleasant to another. Therefore, it is extremely important to select a physical activity which is enjoyable, easy to fit into a regular pattern and works with personal lifestyle issues.

The benefits of physical relaxation also mediate psychological distress such as depression and anxiety. Research has shown that aerobic exercise has had a positive impact on reducing levels of depression and increasing levels of neurotransmitters linked to mood. Therefore, a common intervention for individuals experiencing psychological distress and/or stress is to immediately get moving with exercise.

As research on childhood obesity and early onset of Type-2 diabetes highlights, physical activity must be a lifelong commitment. Children are encouraged to develop good exercise, sleep, and dietary habits early in order to combat serious health problems that can begin early in life and have irreversible consequences. Again, balance appears to be the key. A childhood which includes appropriate academic expectations and family support and responsibilities as well as time for many forms of play and relaxation will most likely result in a happy, healthy individual.

## **Psychological Relaxation**

Many psychologists believe that you can think yourself into a relaxed state. Through cognitive-behavioral therapy, clients learn to transform distress into a more relaxed physical and psychological place. By manipulating our thinking, we can effectively dispute and restructure thoughts which might otherwise lead to depression, anxiety, and physical discomfort.

Clients learn to identify “automatic or irrational thoughts” and are trained to send out a mental lasso to capture these beliefs before they spiral, seemingly, out of control and result in such feelings as worry and anxiety or manifest in stomach upset or muscle tension. The client who is skilled in the slow motion thinking of cognitive-behavioral therapy is able to make in the moment shifts in thinking which can quickly result in reinstating an overall sense of well-being.

In addition to strategies such as cognitive restructuring, many psychologists work with a client's capacity to visualize alternative, positive, and optimal states. Clients may be taught a progressive muscle relaxation accompanied by a guided imagery and eventually will be able to invoke these strategies in times of stress to learn to regulate their own stress responses.

Working with clients' strengths through positive approaches such as solution-focused therapy has revolutionized the practice of psychotherapy. When the psychotherapeutic work centers around building on strengths and maximizing the client's personal ability to attain their goals, the client become more relaxed and confident about their ability to manage life's challenges and bumps.

## **Culture and Relaxation**

Relaxation is a universal value. Throughout world cultures, people value and intentionally create opportunities to obtain relaxed states. From formal governmental initiatives like the 40-hour work week to traditional European extended summer holidays, our world community realizes the necessity of time away from the ordinary routine. Our 24/7 society's struggle with balance is reflected in advances in modern technology that feed the workaholic mentality versus the existence of more leisure time per lifetime than ever before. The rapid transmission of information and quick dissemination of health research, make us keenly aware of the health effects of overwork and a lack of down time.

Ancient cultural traditions all emphasized some type of spiritual dimension that included a connection with life beyond the ordinary. Each year, more and more people are drawn to the teachings and practice of yoga which has its roots in ancient India. Yoga is the ultimate mind-body activity combining ancient teachings directed toward enlightenment with movement that promotes health and relaxation. Quieting the "monkey mind" is one of the wonderful side effects of yoga practice.

Spiritual practices such as prayer and meditation yield peace of mind and larger connection which can be highly comforting and relaxing.

Not all attempts to reach a relaxed state are necessarily positive or healthy. The use of alcohol or drugs to cope with stress, anxiety, and depression can be counter-productive and may create more problems beyond the original discomfort or pain. Images in popular American culture promote alcohol use as a means of obtaining a relaxed and fun social environment. Messages from America's pharmaceutical companies promote the use of prescription medication to promote sleep and other relaxed states; however, these can be just as dangerous as alcohol when wrongly or over used as coping mechanisms.

## **Quick Relaxation Tips**

Both research and clinical evidence point to the powerful impact of simple breath training in promoting a relaxed state that can lower blood pressure and

reduce anxiety. Here are two simple techniques to try to invoke a relaxed state.

Find a quiet space and close your eyes. With your mind's eye, do a body scan, noting any points you might be holding tension within your body. When you come across a tense or tight spot, take a moment to do the following four-count breathing. Inhaling to a count of four and holding for two counts and then exhaling to a count of four. Try to imagine directing the exhaling breath directly into the tight muscle. For a particularly troublesome spot, you may need to do a couple of cycles of breathing prior to moving on through your body. Within ten minutes, you probably will be able to scan through your entire body and will notice a decrease in muscle tension and a feeling of calm and increased well-being. Another option is to add a visualization to the breathing, such as imagining that the breath is being warmed by the sun or imagining that you are lying on a beach or in a warm pool of water or some other personally appealing visual picture.

If you only have a moment, perhaps at a stop light or in the heat of a stressful interpersonal moment either at work or home, try just doing two cycles of the breathing with your eyes open. You can do the four-count breathing completely unobtrusively and it will still yield the benefit of a moment relaxation.

SEE ALSO: ► Heart–brain connection

## Religiousness

Brian J. Zinnbauer  
*Cincinnati, OH*

Religiousness can be understood as a personal or group search for the sacred that unfolds within a traditional sacred context. Vitality concerned with human life, death, morality, virtue, social justice, self-improvement, and “the good life,” religious beliefs and behavior have had profound effects on individuals, groups, and cultures throughout the course of history. Within the past century, psychologists and other social scientists have examined religious phenomena through both theoretical description and empirical inquiry.

### Brief History in Psychology

Religiousness was considered a positive and central element of human development by many of the early twentieth century American psychologists such as William James, G. Stanley Hall, George Coe, and Edwin Starbuck. During this period Europeans such as Sigmund Freud and Carl Jung also produced influential works that described the relationship between religious experience and mental illness or health. However, this early focus and interest waned within American psychology during the middle of the twentieth century with

the rise of behaviorism and efforts to differentiate psychology from religion and philosophy.

Interest in religiousness and spirituality among psychologists rose again in the 1960s and has continued to expand up to the present. In addition to generating theories of religious and spiritual functioning, much work within psychology has focused on scale development and validation. Two research areas of intense inquiry include research designed to determine the relationship between religiousness and various health indices, and methods of incorporating religiousness into mental health intervention. Of note, spirituality as a distinct concept has recently received increased attention, and in contrast to historical conceptions, it has been explicitly differentiated from religiousness. Currently, most American scholars and believers assume that the two terms represent distinct but related concepts.

## Dimensions of Religiousness

How to define religiousness remains the topic of ongoing debate among scholars and researchers within psychology. In general, however, there is consensus that religiousness involves the sacred, is both multidimensional and multilevel, can be associated with both mental health and distress, and is best understood within context. To separate it from the broad concept of spirituality, many characterize religiousness as specifically associated with a traditional context or organized faith tradition.

### The Sacred

In Peterson and Seligman's positive psychology work entitled *Character Strengths and Virtues*, religiousness is considered to be one aspect of spirituality and both are distinguished from other related concepts such as hope, gratitude, meaning, and secular transcendence by their focus on the sacred. The sacred in this sense refers to that which is considered holy, worthy of reverence, or associated with the divine. Aspects of human life such as healthy lifestyles, relationships, changes, goals in life, cultural traditions, and formal rituals can acquire sacred qualities through the process of sanctification, or lose them through desanctification. It appears that individuals pursue, maintain, or react differently to sacred phenomena than to secular objects and processes. These processes have recently been investigated empirically by psychologists such as Ken Pargament and Robert Emmons.

### Multidimensions and Levels

In the past, popular usage and scientific inquiry have often focused on specific aspects of religiousness such as religious attitudes, frequency of prayer, or



religious experiences. However, religiousness is not one-dimensional. Rather, it touches on a wide range of psychological phenomena such as beliefs, behavior, emotions, identity, meaning, personality, and morality. Further, religious correlates and phenomena extend beyond individual intrapsychic functioning to many levels of analysis. In other words, as described by theorist Ken Wilber, concepts such as religiousness can be examined from the micro to the macro in terms of neuroanatomy, intrapsychic phenomenon, states of consciousness, family dynamics, group processes and norms, cultural patterns, social systems, and global concerns. For example, the process of religious conversion may be understood through an examination of neurotransmitter levels, changes in brain activation, emotional experiences, cognitive shifts, alterations in personal and social behavior, role and identity transformations, family impacts, group membership changes, cultural influences, and global events.

Similarly, a full understanding of the relationship between religiousness and positive psychology requires attention to these multiple dimensions and levels. Examples relevant to both domains include faith-inspired resilience, happiness, civic virtues, altruism, social support, family influences, and culture. Likewise, several processes or outcomes may be similarly relevant: the development of character, methods of increasing adherence to healthy proscriptions such as abstinence from alcohol or risky behavior, the process of forgiveness, conversion experiences that solidify identity and resolve suffering, religious aspects of effective coping, and clerical methods of interpersonal influence for health and virtue promotion.

## Health Outcomes

A common error when characterizing religiousness and spirituality has been to assume an evaluative component when defining the concepts. For example, at times spirituality has been portrayed as representing only the positive side of life, and religiousness has been described as a hindrance to spiritual expression. In contrast, a scientific approach to the concepts considers the relationships between religiousness and health as empirical questions to be investigated. Accordingly, several current research programs are examining the relationship between religiousness and specific health outcomes. Two of many examples are the SPIRIT research group at Bowling Green State University lead by Ken Pargament and Annette Mahoney, and the Center for Spirituality, Theology, and Health at Duke University lead by Harold Keonig. A consensus conclusion across studies is that there are positive links between religiousness and mental and physical health. However, the nature of those links is not completely understood, and several critics have argued for greater rigor in the methods used to conduct research on this topic.

Research is also beginning to understand those forms of religiousness that are related to poor outcomes or impairments in functioning. For example, religious struggles with God, with others, or within oneself have been related to psychological distress, slower recovery from physical health problems, and mortality. Other

consistent results have found that negative religious coping, such as prolonged anger at God or conflict among members of a religious congregation, is also linked to declines in physical and mental health.

## Context

Context is one criterion by which religiousness and spirituality are often distinguished: religiousness is that portion of spirituality that unfolds within a sacred traditional context. Cultural context has also been identified as an important aspect of religiousness. Proponents of multiculturalism frequently include religiousness as an aspect of cultural diversity, and professional organizations such as the American Psychological Association and the American Counseling Association explicitly address religion in their codes of conduct as an element of ethnic and cultural diversity that must be considered in professional work.

## Future Directions

The general goals of personal development and civic improvement are common to both religion and positive psychology. Many scholars are currently investigating the various ways in which religiousness contributes to positive and negative mental health outcomes, and this is likely to prove a fertile and rewarding avenue for research in the twenty-first century. Further inquiry that includes the range of phenomena from the biological to the global are needed to provide a clear understanding of religiousness, as well as translating this knowledge into applications that can be used to directly improve the lives of individuals, groups, and societies.

SEE ALSO: ► Spirituality

## Resilience

J. J. Cutuli and Ann S. Masten

*Institute of Child Development, University of Minnesota*

Resilience generally refers to positive adaptation in the context of risk or adversity. It is a broad concept that encompasses a wide range of phenomena, including the capacity of a system to withstand or recover from significant challenges. In human development, resilience research has focused on three distinct situations: a) functioning well during a time of significant adversity (“stress resistance”); b) returning to a previous level of good functioning following a traumatic or severely disturbing experience (“bouncing back”); or c) achieving new levels of positive or normal adaptation when severely adverse conditions improve (“normalization”).

In all these cases, resilience refers to patterns of doing well after exposure to a serious adversity or threat.

People have probably been intrigued with resilience as long as stories have been told of heroes, heroines, and underdogs who overcome great obstacles on the road to success. The science of resilience, however, began only a few decades ago. Resilience research grew out of research on people at risk of developing problems, including children at risk because of their family background (such as having a parent with a severe mental disorder), life experiences (such as premature birth or divorce), or hazardous rearing conditions (such as poverty or neighborhood violence). Investigators seeking to understand the etiology of mental illness began to notice that some individuals “at risk” were doing quite well, even flourishing. Pioneering investigators in the 1970s and 1980s, including Norman Garmezy, Lois Murphy, Michael Rutter, and Emmy Werner, recognized the importance of unexpectedly positive development, and began to search for explanations of resilience. From the outset, these pioneers had the goal of gaining knowledge for promoting better outcomes among individuals at risk for problems.

## **Resilience and Developmental Psychopathology**

Early resilience scientists sought strategies for conducting informative research on resilience at a time when there was little interest in positive psychology and measures of positive adaptation in adults and children were underdeveloped. This mission was facilitated by the emergence of developmental psychopathology, which provided an overarching perspective for conceptualizing different pathways across the lifespan. Developmental psychopathologists emphasized the crucial importance of studying processes that lead to both positive and negative outcomes. This perspective embraced the study of resilience as a key domain of research for preventing problems and also for understanding and promoting positive development. Developmental psychopathology and resilience theory were both deeply influenced by systems theory.

## **Resilience as Process**

In developmental systems theory, all complex patterns of behavior arise from the interaction of many influences acting across multiple levels of analysis. This principle certainly applies to resilience, which emerges from dynamic processes over time. Resilience involves many systems from cells to individuals to families to societies. An individual may be said to have more or less capacity for resilience, but the actual pattern of an individual’s behavior will result from many interactions, both within the person and between the person and environment. Because of the many interactions involved, resilience cannot be viewed as a single trait. In any person’s life, resilience arises from many resources and processes that shape a

positive life trajectory. Many attributes of a person, their relationships, and other resources are involved in these processes. Therefore, efforts to identify a universal trait of “resiliency” that protects people against any adversity are misguided.

## Two Judgments

Researchers soon realized that resilience is an inference based on two fundamental judgments about a person’s life: a) something has occurred with the potential to seriously harm development or disrupt good functioning; and b) the person is doing OK by some criteria. To study resilience, it is necessary for investigators to define and measure two components of resilience: the threat to positive adaptation, usually termed risk, adversity, or stressful life experiences, and positive development or adaptation, often defined in terms of the person’s quality of life or success in major domains of achievement expected for people of a given age in a given culture. In order to explain resilience, it is also important to study predictors of different outcomes among people facing similar threats. Both researchers and practitioners want to know which factors are important in producing resilience among children threatened by adversity and how these factors work.

## Defining Positive Adaptation in Resilience Research

Before one can begin to think about factors and processes that bring about positive adaptation, it is necessary to first define what counts as “positive adaptation.” Investigators have focused on different aspects of positive functioning and development to define and measure the criteria for positive adaptation. These varying criteria are often the product of the specific research goals of the investigators. Some criteria are broader (such as general competence) and some are narrower (such as academic achievement). Some focus on behavioral development and health, whereas others emphasize physical health.

Many studies have focused on two broad domains of adaptive behavior, often called *psychopathology* and *competence*. Studies with a focus on mental health typically define adaptation in relation to subjective well-being and the absence of clinical levels of symptoms or disorder. Thus, good adaptation is judged from assessments that a person is showing positive mental health rather than emotional or behavior problems. In contrast, developmental scientists often define positive adaptation in terms of competence in age-salient developmental tasks.

Developmental tasks are the standards for behavior by which people of a particular age are judged in a given culture and time in history. Many developmental tasks are common across cultures, whereas some are unique to specific cultures. For small children, common developmental tasks include forming an attachment bond to a caregiver, learning to walk and talk, and following simple commands. In school-age children, key tasks include school success, getting along with peers,

and following the rules of home, school, and community. During adolescence, individuals are expected to learn more advanced subjects, behave and follow rules across contexts (including societal laws), form close relationships with peers, and begin to explore the worlds of work and romantic relationships. In adulthood, work and romantic relationships become salient tasks, often followed by family formation and parenting. Successes in these changing developmental tasks indicate that a person is adapting to society in expected ways. Outstanding achievement is not required; instead, the person is expected to meet minimum standards for functioning. Such achievements also carry the implicit expectation for future success.

One of the basic tenets of developmental psychology is the idea that achieving competence in one developmental period facilitates the development of later competence. There are cumulative effects of competence: success in one period of development is carried forward because it provides a strong foundation of skills and achievements on which future competence is built. Along with competence, children develop adaptive tools for life that are honed by experience.

## **Threats to Positive Adaptation or Development: Risk and Adversity**

Attributes of a person or a person's situation that forecast later problems are called *risk factors*. Research on groups of people who have certain factors in their lives has indicated that there is an elevated chance for a specific negative outcome among the group as a whole. Those with these certain risk factors are often said to be "at-risk" for the problematic outcome. Risk factors commonly co-occur, and there may be a much greater likelihood of problems when risk factors accumulate in the lives of individuals. Risk is a general term that includes a wide variety of predictors, including traumatic life events, chronic disadvantages, and status variables. In psychology and resilience science, the risk factors of poverty, low socioeconomic status, violence and maltreatment, prematurity and low birth weight, minority status, war, and natural disasters have all received a great deal of study.

Given the goal of understanding how individuals overcome adversity, it is important for resilience researchers to understand how negative life experiences interfere with competence. Risk factors may exert their deleterious effects in many different ways during various times in development. Some risk factors, such as malnutrition or exposure to toxic substances, interfere directly with the function or development of adaptive biological systems. Other risks can operate through limiting the experiences or opportunities available to the individual, for example when children with a chronic illness are not able to interact with peers in normal social activities, or adolescents living in severely impoverished areas have little access to quality schools. Still others work by increasing the likelihood of experiencing additional adversities: People who are impulsive tend to have more accidents or injuries.

The impact of risk factors also can vary for different periods of development. For example, caregivers are important across many ages, but very young children are highly dependent on others for care. Consequently, young children may be more affected than older youth by risk factors that interfere with the caregiver-child relationship, including the loss of the caregiver or risks that involve substandard levels of care, such as a severe depression in an infant's primary caregiver.

## **Predictors of Resilience: Promotive and Protective Factors**

Given the twin goals of understanding and facilitating resilience, it is important to study the factors that predict resilience and how these work. Resilience researchers have studied many potential factors that might account for better outcomes in the context of risk or adversity. These have come to be called promotive and protective factors. *Promotive factors* are associated with good outcomes in general, regardless of risk exposure. Healthy brain development and good parenting predict many good outcomes in life, regardless of risk exposure. In contrast, *protective factors* moderate risk, showing a special effect when adversity is high. Some protective factors are analogous to airbags in automobiles or the antibodies of the human immune system. They have no function until they are activated by threat and then they serve a protective role. Emergency social services, like child protection, are intended to work in this way.

Other protective factors have a generally promotive role even when risk is low, but also take on special protective functions when adversity is high. Many of the most basic (and flexible) human adaptive systems serve multiple roles in this way, probably as a result of biological and cultural evolution. For example, parents serve many roles in human development, both at low and high levels of adversity. A good parent may routinely feed and care for a child and promote developmental task achievements, such as school success, but also may take special action in the face of a major threat. Thus a parent may intervene to protect the child from impending harm or help the child recover, as when a parent prepares a child for the loss of a loved one or helps a child recover from an assault or a house fire.

Studies of developmental resilience around the world have repeatedly noted a striking consistency in the most frequently reported promotive and protective factors, including attributes of individuals, their relationships, and the contexts that appear to offset or ameliorate risks. The most widely reported of these factors are good relationships, and in the case of young children, a secure attachment bond with a competent caregiver. Close relationships have been found to moderate risk across all ages. Caregivers who provide warmth, security, and reassurance in the face of adversity are robustly associated with favorable outcomes in children, whereas impaired caregiving is particularly damaging. The protection afforded by caregivers is multifaceted. Caregivers are a direct resource of help and security for children, and they also play a major role in the development of other protective

factors, including self-regulation skills, cognitive skills, and relationships with other people. Research has documented the role of positive relationships with caregivers on many aspects of development and particularly in the building of adaptive tools for competence.

Social connectedness to people beyond the family is also a key type of protective factor. Connections with adults, including teachers, coaches, or mentors, have positive benefits for children and youth. These adults can be a positive influence and provide stability that is lacking in the child's home life when the family is disrupted by adversity. Peer relationships and acceptance also may serve an important protective role as children grow older. In addition to providing another source of support, peers help a child internalize sociocultural values while affording opportunities to develop and refine good social skills. In these ways, peer relationships may provide a supportive training ground for at-risk children to cultivate the interpersonal abilities that foster later close relationships and building of social support networks over the lifespan.

Another important group of protective factors is related to individual differences in cognitive functioning, self-efficacy, motivation, and self-regulation skills. Children with good problem-solving skills and age-appropriate regulation of emotions, attention, and actions, who believe in themselves and are motivated to adapt, often fare better when confronted with adversity. Such children have a broad range of personal attributes and skills at their disposal; they find more opportunities, they persist in the face of challenge, and they also seem to attract more support from other people, attributes that serve them well in adverse situations.

## **The Promise of Resilience Science for Prevention and Clinical Intervention**

Understanding how risk and resilience processes operate has revolutionized thinking and strategies for prevention and treatment, shifting models, methods, and measures toward a strengths-based approach. In resilience-based frameworks, prevention and practice are oriented to set positive goals, to measure assets and protective factors as well as risks, and to include strategies intended to increase the odds of resilience by reducing risk exposure, increasing promotive factors, and mobilizing protective systems. Preventive interventions and programs are being designed to foster positive outcomes among individuals believed to be at-risk due to existing or anticipated adversities. In addition, prevention research with experimental designs holds the potential to test theories about promotive and protective processes and how they work, thus contributing to resilience theory as well as evidenced-based practice.

As resilience science expands, models of risk and protection are beginning to incorporate multiple levels of analysis and their function across the lifespan. Consequently, comprehensive and integrated accounts of resilience are emerging that include the interactions among genes, neurobiology, behavior, family and

peer relationships, and the larger systems represented by neighborhoods, schools, communities, and cultures. As ongoing research on resilience in development continues, diverse stakeholders in the health and well-being of young people have a growing body of knowledge to inform their policies and programs. As a result, there is promising progress toward the goal of evidenced-based interventions to promote resilience in people at risk across the lifespan.

SEE ALSO: ► Attachment theory ► Developmental psychopathology  
► Protective factor ► Werner, Emmy

## Respect

Susan S. Hendrick and Clyde Hendrick  
*Texas Tech University*

Respect is an important component of both personal self-identity and interpersonal relationships. Feeling respected can almost be considered a basic human right.

### Studying Respect

According regard or perceived worth to someone conveys a sense of respect, and valuing another person's feelings and thoughts is also part of the respect process. Respect has been studied less than has disrespect, with the latter behavior related to stereotyping, prejudice, issues of power and status, injustices, and the like. *Disrespecting* someone is serious business and can lead to ruptures in relationships, gang violence, and wars between nations.

Respect has been studied in the workplace, since it may play a part in hiring decisions. Jackson, Esses, and Burris found that liking, respect, and gender stereotyping were all related to hiring decisions, but respect was of particular importance. Issues of respect may also differ for women and men. Tannen noted numerous gender differences in communication strategies and observed that women in work settings want to be liked. In order to achieve this, they may forego being respected. Men, on the other hand, may more likely opt for respect, sometimes being liked less as a result.

Important as respect might be in the workplace, it is even more significant in personal relationships, particularly intimate, partnered ones.

### Respect in Close Relationships

Although romantic relationships are the primary focus here, some interesting research has explored respect-giving and respect-denying behaviors among cross-sex friends.



Denial of respect to friends impairs the friendship, and indeed, awarding respect may be almost a “rule” in both close friendships and romantic relationships. It is important in relationships such as marriage in many cultures and countries, and its meaning changes over time. For example, Hirsch found that in Mexican marriages, formal respect between partners has been a part of traditional marriage and traditional gender roles. Yet more recently, intimacy has joined respect as an important value for marital partners. Some contemporary scholars believe that mutual and egalitarian respect is an essential characteristic of marital love and an enduring marital relationship. The clinical literature addressing couple therapy and enrichment has openly mentioned respect as an important ingredient for a relationship that “works.” Indeed, John Gottman has worked with couples for decades, noting that most couples desire “just two things from their marriage – love and respect” (1994, p. 18). Scholars such as Feeney, Noller, and Ward found that respect was one of five dimensions of marital quality. Yet although respect has been rather widely acknowledged as important, research on respect in romantic relationships has been relatively recent.

## Current Research on Respect in Relationships

Frei and Shaver set out to systematically explore respect in the context of close relationships. They first determined the features that people would identify as central to the construct of respect as it might be enacted in both romantic relationships and in parent/caregiver relationships. Across several studies, they found that respect seemed to be an attitude rather than an emotion, that there was relative consistency across people from different ethnic groups in identifying several central aspects of respect, that a partner’s “respect-worthiness” was important when measuring respect, and that respect was a better predictor of relationship satisfaction than were measures of love, liking, or attachment. They also developed a measure to assess respect in romantic relationships.

A keen observer of respect, sociologist Sara Lawrence-Lightfoot addressed the topic in *Respect: An Exploration*. She wrote in biographical form about six different people whom she viewed as embodying six different dimensions of respect. Her words bring these people to life. These exemplars of respect include a midwife, who in the drama of birth, gives inner-city women a sense of their own *empowerment*; a pediatrician whose respectful *healing* supports both children and their parents; a high school English teacher whose creative *dialogue* allows her students to be heard; a photographer whose *curiosity* about his subjects makes the photo process a collaboration, a law professor whose goal is to challenge in order to engender *self-respect* in his students, and a chaplain who works with dying persons through *attention*, as a witness to the transition. These embodiments of respect, transcending race and gender, speak the dimensions of respect in their actions.

Consonant with these six dimensions is the concept that relational respect carries, among other things, aspects of both equality/mutuality and caring/supportiveness.

The notion of mutuality is highlighted by other scholars, and the caring aspect is an inevitable part of valuing another person because of their sheer existence in the world and in our lives.

Research by Hendrick and Hendrick built on Lawrence-Lightfoot's conception of respect and was consistent with other work showing respect's fundamental importance to relational satisfaction. For example, in the Hendricks' research, respect was related positively to passionate, friendship-oriented, and altruistic love as well as to commitment, satisfaction, and other positive relationship qualities. These findings were consistent for both college students and older persons in the work force; thus respect is powerful for relational partners who are of different ages and different relational stages. Not surprisingly, respect was related negatively to game-playing love. Respect that is both caring and egalitarian has no place for game-playing. In the actual prediction of relationship satisfaction for people in romantic relationships, the two most powerful relational conditions were passionate love and respect. Passionate love has been shown to positively affect satisfaction in many previous studies, but the results for respect are new and compelling. It appears that respect has always been in the background as a sustaining relational force, but only recently have we begun to understand just how important it is.

## **Future Directions for Studying Respect**

Respect can be viewed through a number of lenses in the years ahead. One interesting conceptual direction is the possible evolutionary basis for respect. It is evolutionarily adaptive for humans to live in groups for purposes of safety and sustenance, and pair-bonding between males and females is necessary for reproduction and species continuation. Positive emotions such as love foster these bonds, and it is logical to assume that respect would also. Respect within the group might allow for both protection of those who do not hold power and a judicious balance between those who do hold power. Within the couple, respect appears to contribute to satisfaction, which in turn is related to the continuation of the relationship.

Another area of investigation might be the relationship between respect and conflict in romantic relationships. When partners have greater respect for each other, their conflict may be reduced. Or perhaps partners who respect each other feel comfortable disagreeing. Perhaps the level of respect in the relationship relates to the ways in which conflict is enacted, such that respectful disagreement characterizes couples in which each partner has both high self-respect and high respect for the other. These issues and questions can help in better understanding the "successful" relationship.

Finally, how does respect influence personal growth and the "self-identity" mentioned earlier? Carl Rogers referred to "unconditional positive regard" as a core facilitative condition for psychological growth. Perhaps respect, given freely and

without condition, can contribute to psychological and even relational growth. The future study of respect is rich with promise.

SEE ALSO: ► Romantic love

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## Rogers, Carl

John C. Wade

*University of Kansas*

Carl Rogers (1902–1987) is known as the founder of client-centered therapy, emphasizing a nondirective, collaborative relationship in which the client determines the focus and pace of treatment. He was a leading spokesperson for humanistic psychology, and fostered advances in psychotherapy research. Rogers studied religion as an undergraduate, before changing his focus to psychology and earning an MA and then a PhD from Columbia University in 1931.

Rogers began to question the prevailing Freudian psychoanalytic climate of the period, and differed from Freud in that he regarded people as basically good and healthy, with the potential to understand themselves and resolve their own problems without direct intervention from the therapist. Rogers' theory is founded upon this principle, termed the *actualizing tendency*, which assumes that we all have an innate motivation not just to survive, but to develop our potential to the fullest extent possible and to find and create meaning in our lives.

Rogers contended that if the therapist created an environment where the client experienced genuineness, acceptance and empathy from the therapist, growth and positive change would naturally occur. Three attributes of the therapist are necessary for a transformative therapeutic environment to occur: 1) congruence – the therapist is genuine and authentic with his/her clients; 2) unconditional positive regard – the therapist is accepting, caring and nonjudgmental; and 3) accurate, empathic understanding – being able to deeply grasp the subjective, lived world of the other person.

Although we have a natural inclination toward self-actualization, Rogers believed that as we develop, our parents, teachers, peers, etc. place “conditions of worth” on us. We are praised and reinforced only for certain behaviors, such as eating our vegetables, and are criticized or shunned for other behaviors such as talking too loudly. This leads us to believe that acceptance and positive regard is conditional, and causes us to shape our behavior to meet the expectations of

others instead of allowing our behavior to be guided by our actualizing tendencies. The unconditional positive regard and trust in the client shown by the therapist enables the client to reconnect with his or her authentic self. Because of the belief in the client's capacity for awareness and positive change, the client-centered approach rejects the role of the therapist as the authority and gives responsibility primarily to the client.

Rogers served as president of the American Psychological Association in 1947, and received a distinguished contribution award in 1956 for research in psychotherapy. In his later years, Rogers expanded his focus to education, business and industry, conflict resolution and the search for world peace. Shortly before he died, he was nominated for a Nobel Peace Prize for his efforts at the reduction of interracial tension and achieving world peace. Rogers wrote several influential books, including *Counseling and Psychotherapy* (1942), *Client Centered Therapy* (1951), *On Becoming a Person* (1961), and *A Way of Being* (1980). Rogers' legacy has profoundly impacted the practice of psychotherapy, and is the foundation for many of the key principles of positive psychology today.

SEE ALSO: ► Actualizing tendency ► Humanistic psychology  
► Positive therapy

## Romantic Love

Clyde Hendrick and Susan S. Hendrick  
*Texas Tech University*

Love consists of great emotional affection, and loving another person and being loved by that person in turn are among the most meaningful aspects of being human. Romantic love and many other types of love are all of great importance in our lives.

## Love in the Human Condition

Love is one manifestation of the basic human need for connection, referred to by Baumeister and Leary (1995) as the "need to belong." This need for connection requires that people have some number of "lasting, positive, and significant personal relationships" (p. 497). The actual number of these relationships depends on a person's preferences and life situation, since some people want only a few intimate relationships, whereas other people want numerous meaningful connections with others. To meet human needs for belonging, these relationships must be positive, ongoing, and stable.

People typically begin forming relational bonds in infancy, establishing a template for relatedness that may follow throughout a person's lifetime. Attachment

theory describes how infants and their parents develop these bonds during early months and years. Attachment theory has been expanded to include the bonds that adult romantic partners have with each other.

Love is one aspect of intimate attachment. Shaver, Morgan and Wu proposed that love is a basic human emotion, much like joy or sadness. Because virtually all people feel love at one time or another, evolutionary scholars have said that we are “hard-wired” for love, meaning that the ability to love and be loved is part of our biological nature. Some scholars have pointed to the adaptive nature of love, noting that it aids in reproduction and continuation of the species. For example, romantic love guides the mating process that results in reproduction, whereas mother love ensures that mothers feed and nurture their infants.

Many types of love exist, including love of parents for children and children for parents, love of family, love of friends, and so on. Our focus is romantic love – the kind of love that leads to marriage and other long-term partnerships.

## History of the Study of Love

For centuries, love has been a major theme of drama, poetry, literature, art, and music. Irving Singer detailed the history of the study of love and identified four broad conceptual ways of looking at love: Agape (divine love); Eros (love for what is beautiful or good); Nomos (love resulting in obedience to a deity or a loved one); and Philia (friendship love). Singer also proposed two fundamental ways of loving another person, *appraisal* and *bestowal*. Appraisal is love that is given because of the perceived value of particular qualities that the loved one is seen to have, whereas bestowal is given simply because the other person exists in the world. It is love given without conditions.

Social scientific study of love is relatively recent. For example, Berscheid and Walster contrasted passionate and companionate love. Passionate love is emotionally intense and characterizes early stages in love relationships. As this “hot” love cools during the course of a relationship, companionate love, cooler and more friendship-oriented, presumably emerges from the ashes of passion. More recently, however, research has shown that both passionate love and friendship-oriented love are important to partners early in their love relationships and much later as well. Contemporary research on love has broadened greatly both our ways of thinking about love and our ways of measuring how people love each other.

## Conceptualizing and Measuring Love

### Friendship and Love

Davis and Todd conceptualized loving and liking as sharing many of the same characteristics, though in different amounts, and they developed the Relationship

Rating Form to measure those characteristics. The scale was later refined to include six subscales: Care; Conflict; Intimacy; Passion; Satisfaction; and Viability.

### Passionate Love

Hatfield argued for the importance of passionate love as an extremely important form of love that is found across historical periods and world cultures and is essentially “universal” to the human condition. Hatfield and Sprecher developed the Passionate Love Scale to measure this form of love.

### Prototypes of Love

Fehr took a prototype approach to the study of love, attempting to discover the “best examples” of love. She found that people rated companionate love as the most *typical* example, but friendship, parental and maternal love were also viewed as good examples of love. Fehr was not particularly seeking to find romantic love, and indeed found that passionate and sexual love were rated as less “typical” of love. Other researchers sought the best example of romantic love and found that passion emerged as one of the central features. It seems that characteristics seen as important to love may vary depending on the type of love that is being considered.

### Love and Self-Expansion

Aron and Aron took the perspective of Eastern traditions in conceptualizing the growth of the self, referring to it as *self-expansion*. One method of self-expansion is falling in love, wherein the partner is incorporated into one’s own self in an expansion process. This expansion is measured by having respondents draw circles (representing self and partner) which overlap each other, thus showing how much of the partner is actually viewed as part of the self.

### Love as a Triangle

An important theory of love, the triangular theory of love, was proposed by Sternberg, who viewed love as composed of mixes of three primary components: intimacy; passion; and commitment. These components, when combined in varied proportions, result in eight different kinds of love: consummate love (all three components present); nonlove (all components absent); liking (primarily intimacy); infatuated love (primarily passion); empty love (primarily commitment); companionate love (intimacy + commitment); fatuous love (passion + commitment); and romantic love (passion + intimacy).

More recently, Sternberg has presented the view that people in essence create their own love stories. In *Love Is A Story*, he offered 25 love stories or “guiding metaphors” that people enact in their romantic relationships. If love is indeed a

story and people can be helped to understand their own story, they can sometimes “rewrite” aspects of the story to achieve happier relational outcomes.

### Love Styles

People have different personality styles, so perhaps they also have different love styles. Still another theory of love was developed by Lee, whose research revealed that people have different love styles. Six major love styles have been studied extensively: Eros is the passionate love style, characterized by intensity, communication, and a tendency toward “love at first sight”; ludus is the game-playing love style, avoiding commitment and just wanting to have a good time; storge is the friendship-based love style, epitomizing stable, companionate love; pragma is the practical love style, characterized by practical searching for an appropriate love partner; mania is the possessive, dependent love style that is insecure and experiences intense emotional highs and lows; finally, agape is the altruistic love style, characterized by concern for the partner’s welfare, sometimes above one’s own welfare. Questionnaires to measure the love styles were developed and refined over a number of studies. Most recently, a 24-item measure called the Love Attitudes Scale: Short Form is typically used to measure the love styles.

Developing theories about and measures of romantic love is the work of scholars, yet how does this work answer questions and solve problems that happen to real people in real romantic relationships?

### Love: Gender, Sex, Age, and Culture

Popular media often gives us the impression that women and men have very different approaches to love, but when it comes to love styles, the genders are more similar than they are different. Yet they are not exactly the same. For example, men tend to report being both more game-playing and altruistic than women, whereas women are more friendship-oriented than men. Yet these differences are small.

Love and sex have often been decoupled by researchers, such that the two topics are studied as though they have nothing to do with one another. Another point of view is that sex and love are linked but that one is more important than or “subsumes” the other. Aron and Aron placed such ideas on a continuum, anchoring “sex is really love” at one end and “love is really sex” at the other end. Research specifically exploring people’s everyday perceptions of the links between love and sex indicate that love and sex are linked, not separated, and that both are viewed as important in romantic relationships. When people wrote about how love and sex were linked in their relationships, several themes emerged, including the idea that “love is most important” and “sex demonstrates love.” Both relational aspects were deemed significant.

As noted earlier, couples at all ages and stages of relationships appear to value both the passionate and friendship components of love. Research exploring how

love might contribute to relationship satisfaction in young, dating couples found that a combination of passionate, friendship, and altruistic love was a positive predictor of relationship satisfaction, but game-playing love was a negative predictor. Montgomery and Sorell (1997) assessed love styles and other constructs in young unmarried adults, married adults under age 30 and without children, married people aged 24 to 50 with children still at home, and married people aged 50 to 70 without children at home. The greatest differences were not between the younger and older couples but rather between the people who were unmarried and those who were married. Other research studies show similar results: younger and older couples simply do not differ as much as we might think. "Individuals throughout the life-stages of marriage consistently endorse the love attitudes involving passion, romance, friendship, and self-giving love" (Montgomery & Sorell, p. 61).

Love does not look drastically different across genders or across ages, but several studies have sought to understand how love might differ across countries and cultures. Although Hatfield argued that passionate love is fundamental across both historical periods and world cultures and is essentially universal to humanity, others noted that love exists within a cultural context and must be understood that way. Cho and Cross considered ancient Chinese literature and proposed that several different types of love (e.g., passionate love, casual love, obsessive love, devoted love) were apparent during historical eras from 3,000 to 500 years ago. So these are not recent innovations in the Eastern (or Western) world. These authors also explored current love styles among Taiwanese students living in the United States, finding that although several love styles existed, they were not exactly the same love styles proposed by Lee. In fact, Agape (altruistic love) and Pragma (practical love) combined to form an "Obligatory Love" type, which was more appropriate to Taiwanese culture than Agape or Pragma considered separately. Pacific Islanders, Japanese Americans, and European Americans (all living in Hawaii) were compared on love and relationship characteristics, with no differences between the groups for either companionate or passionate love. Such findings, which are echoed by other research studies, are not surprising if in fact love is a basic emotion, is part of a fundamental need to be "in relationship," and is part of our biological make-up. We are likely much more the same in our humanity than we are different.

In spite of all the theory-building, measurement development, and accumulating research findings, questions about love remain. It is almost as if our answers to existing questions simply produce more questions.

## Future Directions for the Study of Love

Loving others and being loved by them is a basic part of what it is to be a person, so love is clearly an important topic. It appears that many aspects of love have transcended time and culture, and many of the ways in which we experience and express romantic love are similar to the ways in which such love was expressed



in ages past. Yet societies are changing rapidly in a world in which technology is exploding, distant cultures are becoming neighbors, and the future in some ways may differ from the present more than the present differs from the past. How might love evolve in a world of constant communication (e.g., via cell phones and email) where real connection may become more and more elusive? Will our increasingly global village result in racial and cultural barriers being lowered, so that more romantic relationships may be formed between persons of different cultures, races, religions? Exploring love's evolution – and its constancy – remains a fascinating task for the future.

SEE ALSO: ► Adult attachment security ► Intimacy ► Respect

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## Ryff, Carol

Corey L. M. Keyes

*Emory University*

Carol Ryff is the Director of the Institute on Aging and a Professor of Psychology at the University of Wisconsin, Madison. Her research centers on the study of psychological well-being, an area in which she has developed multidimensional assessment scales (translated into more than 25 different languages). Her article on psychological well-being, published in 1989 in the *Journal of Personality and Social Psychology*, is a classic in the field of well-being. It is considered by many to be among the seminal articles that launched the study of the eudaimonia tradition of well-being within the discipline of psychology.

Subsequent research by Carol Ryff and colleagues has addressed how psychological well-being varies with age, gender, socioeconomic status, ethnic/minority status, cultural context, as well as by the experiences, challenges, and transitions individuals confront as they move through the life course. Two primary themes characterize her most recent work. First, she has investigated whether psychological well-being is protective of good physical health during life transitions and stress. Second, she is among the leading researchers investigating psychosocial health and its linkages to biological markers in ongoing longitudinal investigations linking positive psychosocial factors to neuroendocrine, immune, cardiovascular, and neural circuitry biomarkers. The guiding theme within Ryff's research is human

resilience, i.e., how some individuals are able to maintain, or regain, their well-being in the face of significant life challenge and what neurobiology underlies this capacity.

Carol Ryff was born in Wheatland, Wyoming on October 27, 1950. She earned her PhD in 1978 in lifespan psychology in the College of Human Development at Pennsylvania State University. Her mentors at Penn State were Orville “Bert” Brim in sociology and Paul Baltes in psychology, both of whom were the pioneers in creating the field of lifespan psychology. Starting in 1988, she was among a handful of select scholars chosen to form the nucleus of the John D. and Catherine T. MacArthur Foundation’s interdisciplinary Research Network on Successful Midlife Development. She has been honored as being elected a fellow of the Gerontological Association of America, and Division 20, Adult Development and Aging, of the American Psychological Association. She also has been awarded the Henry Murray in 2003 by the Society for Personality and Social Psychology. Carol Ryff has published over 120 publications in the research areas described above. She is currently the director of the MIDUS (Midlife in the US) longitudinal study, which is based on a large national sample of Americans and twins. Funded by a \$28 million grant from the National Institute on Aging, the MIDUS longitudinal study has become a major forum for studying health as an integrated biopsychosocial process, reflecting Carol Ryff’s passion for fostering interdisciplinary and integrative research on health and human development.

SEE ALSO: ► Well-being

# S

## **Saleebey, Dennis**

Uta M. Walter

*Catholic University of Applied Sciences, Berlin, Germany*

Dennis Saleebey, DSW, born August 29, 1936, is Professor Emeritus at the School of Social Welfare, University of Kansas, and perhaps best known for his work on the *strengths perspective* in social work. Saleebey coined this term through various publications, most notably *The Strengths Perspective in Social Work Practice*, currently available in its fourth edition. Saleebey started his professional career as a mental health social worker for the U.S. Air Force in the 1960s in San Antonio, and advanced to Chief Social Worker in the Child Diagnostic Clinic of Wilford Hall Hospital. He received his doctorate from the University of California – Berkeley in 1972, and began his academic career at the University of Maine. Saleebey's interests soon shifted away from the individual and pathology-focused approach he had encountered in clinical social work toward those factors that made people, families, and communities stronger, more resilient, and more hopeful. Particularly inspired by Ernest Becker's scholarship on how humans construct and revise meaning for their lives, Saleebey began to ask how people are capable of overcoming the most difficult of circumstances, and how some are not merely coping but at times even thriving in the face of adversity.

After 17 years at the University of Texas at Arlington, Saleebey, by then a widowed father of four children, joined the faculty of the University of Kansas in 1987. Together with Ann Weick, he challenged the profession's tendencies to focus on problems and dysfunctions. Fervently seeking beyond the bounds of social work, he connected with kindred ideas including those of the late Insoo Kim Berg and Steve de Shazer and their solution-focused approach, Michael White's narrative

therapy, Steven and Sybil Wolin's resiliency work, and Roger Mills' approach to community development. Adding to the chorus of social work scholars who championed postmodern ideas, Saleebey argued for the reconnection of social work with its roots of empowerment and for shifting the focus toward strengths and capacities. In his own words:

I believe, in the long run and in the most generous sense, that the business of social work is to ease or quell oppression and to engage those we help in the search for the liberation of spirit, soul, body, – and community. I also am convinced of the magnificence of the capacity for rebound and resilience in people(s). Surely it can be compromised, even crushed, but it stands as a testimony to our survival as a species, and to the inner beacon of the soul. I believe that, in the end, individual transformation depends to an uncertain degree upon the transformative power of social justice. (Saleebey, 2001, p. xi)

Saleebey's scholarship has consistently dealt with the intersection of culture, meaning, and narrative and most recently with the biopsychosocial perspective promoted in the field of social work. Finding social work's attention to the biological aspects lacking, Saleebey explicates how the neurological and the narrative intersect to make up the human experience in his unusually narrative textbook *Human Behavior and Social Environments: A Biopsychosocial Approach*.

SEE ALSO: ► Social work ► Strengths perspective (social welfare)

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## Saving

Kimberley R. Monden  
University of Kansas

Saving and financial health are related to a number of positive psychological constructs, such as psychological and social well-being, locus of control, and coping. In the current literature, there is not one universally agreed upon definition of *saving*, for example Lunt and Livingstone (1991) tell us that "saving refers to money put in banks or building societies as protection against future insecurities or to save up for particular goods and services" (p. 624). Further, Romal and Kaplan

(1995) define saving as “a matter of putting aside present needs and wants in the expectation of future needs and wants” (p. 10). Katona goes into more detail and distinguishes between 3 different types of saving: contractual, discretionary, and residual. First, *contractual* saving involves paying installments to oneself regardless of circumstances. Second, *discretionary* saving is the deliberate saving of spare income. Finally, *residual* saving is money not yet spent and therefore saved by default. Given the array of definitions currently being used, it becomes clear that a coherent and detailed definition of saving is needed so that one common language can be used across different research domains.

Historically, the topic of spending has been more comprehensively researched than the topic of saving, as economists, market researchers, and consumer psychologists have examined the motives, both economic and psychological, behind people's spending habits. Traditionally, economic theory has held that the amount people save is not reliably predictable by psychological variables, but is better explained by a number of other factors such as income, socioeconomic status, and number of children in the family. Recently however, economic theory has begun to acknowledge the psychological factors involved in saving such as self-control, fear of economic uncertainty, and pessimism about the economy. Furthermore, the amounts of money people commit to regular saving have been predicted by a variety of psychological factors including locus of control, coping, income, valuing enjoyment, shopping behavior, and social networks.

As economic and financial statistics continue to reveal that people are carrying heavier debt loads, and thus are less financially secure, psychologists are now concerned with the burden of carrying an increased amount of debt and the implications of financial insecurity on the quality of our relationships and overall psychological well-being. Recent research has begun to investigate the psychological impact of debt. For instance, in a sample of college students, increased debt and perceived financial instability were found to be related to decreased psychological well-being and dysfunctional impulsivity. Other studies have linked high levels of debt and a disproportionate debt/income ratio with a variety of negative consequences, such as stress-induced health problems, and decreased academic performance. Furthermore, in his book, *The High Price of Materialism*, Kasser describes his and others' research showing that when people organize their lives around extrinsic goals such as product acquisition, they report greater unhappiness in relationships, poorer mood, and more psychological problems.

Since preliminary research seems to support the notion that increased debt is associated with negative consequences on a variety of psychological factors, it appears that financial health is a salient and relevant topic to the field of psychology. If we can begin to build a better understanding of the psychological factors that motivate people to save, or at least avoid debt, then perhaps we can help to bolster these attributes in our clients.

SEE ALSO: ► Coping ► Locus of control

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## Savoring

Fred B. Bryant, Carrie L. Ericksen and Adam H. DeHoek  
*Loyola University Chicago*

*Savoring* is the capacity to attend to, appreciate, and enhance the positive experiences in one's life. Savoring involves cognitive and behavioral processes that regulate positive feelings; that is, thoughts, and behaviors that influence the frequency, intensity, and duration of positive experience, including joy, pride, gratitude, awe, and pleasure. The term "savoring" was first used in this context by Bryant in 1989.

Savoring processes are largely independent of coping processes. Whereas *coping* moderates the quality of negative experience, savoring moderates the quality of positive experience. In addition, just as coping is distinct from the experience of pain or distress, so is savoring distinct from the experience of joy or pleasure. In contrast to flow, which is short-circuited by self-awareness, savoring requires a conscious meta-awareness of one's positive feelings while one is experiencing them. The process of savoring also requires that one be relatively free from threat or self-esteem concerns, in order to have the cognitive resources necessary to attend to ongoing positive feelings.

Although savoring requires a focus of attention on positive feelings in the present, savoring may also involve a temporal focus on either the past (termed *reminiscence*) or the future (termed *anticipation*). When people savor through reminiscence, they attend to positive feelings that they rekindle from the past, or attend to other positive feelings they experience when looking back on the past. When people savor through anticipation, they attend to positive feelings they imagine they will have in the future, or attend to other positive feelings they experience when looking forward. People may also enhance the quality of an unfolding positive experience by remembering how much they looked forward to it earlier (i.e., *recalled anticipation*) or by looking forward to reminiscing about it later (i.e., *anticipated recall*). Regardless of the source, the positive feelings that one experiences when savoring are in the here-and-now.

In explicating the nature of savoring, it is important to distinguish four inter-related conceptual components: savoring experiences, savoring processes, savoring responses (or strategies), and savoring beliefs. At the broadest level, a *savoring*

*experience* consists of one's sensations, perceptions, thoughts, behaviors, and feelings when mindfully attending to and appreciating a positive stimulus (e.g., listening to a virtuoso musical performance).

At the intermediate level, a *savoring process* is a sequence of mental or physical operations that unfolds over time and transforms a positive stimulus into positive feelings to which a person attends and savors. Different savoring processes regulate different positive emotional states. For example, marveling regulates awe, thanksgiving regulates gratitude, basking regulates pride, and luxuriating regulates physical pleasure.

At the smallest level, a *savoring response* or *strategy* is the operational component of the savoring process – that is, a specific, concrete thought or behavior that amplifies or dampens the intensity, or prolongs or shortens the duration, of positive feelings (e.g., mentally congratulating oneself while basking in response to a personal achievement). The distinction between savoring processes and savoring strategies parallels the distinction between coping processes (such as mourning, that change over time as people interact with their environment) and coping strategies (such as denial, which are specific cognitions or behaviors that influence the coping process).

Bryant and Veroff have identified ten savoring strategies that people use in relation to positive experience: sharing with others, memory building, self-congratulation, sensory-perceptual sharpening, comparing, absorption, behavioral expression, temporal awareness, counting blessings, and kill-joy thinking. Bryant and Veroff developed the 60-item Ways of Savoring Checklist as a self-report instrument for assessing people's use of savoring strategies in response to positive outcomes. Different cognitive appraisals are associated with the use of different savoring strategies. For example, stronger internal causal attributions for a positive outcome predict higher levels of self-congratulation, greater perceived outcome rarity predicts greater memory building, and greater perceived event desirability predicts greater use of counting blessings. Women, compared to men, tend to engage more in sharing with others, behavioral expression, and counting blessings (all of which are associated with greater enjoyment) in response to positive outcomes, whereas men report a greater use of kill-joy thinking (which is associated with less enjoyment).

Savoring experiences can be differentiated in terms of whether one's dominant focus of attention is on the external world or the internal self. In *world-focused* savoring, the source of positive feelings is primarily identified with something or someone outside oneself (e.g., a spectacular sunset). In such experiences, savoring is largely experienced as an involuntary, uncontrollable positive emotional response to an external stimulus. In *self-focused* savoring, on the other hand, positive feelings are primarily perceived as originating within the self. Savoring experiences can be further distinguished in terms of whether they primarily involve *cognitive reflection* (in which one introspects about one's subjective experience) or *experiential absorption* (in which one minimizes introspection in favor of perceptual engrossment).

Combining the distinctions between world- versus self-focused attention and between reflection versus absorption produces a  $2 \times 2$  classification model of four primary savoring processes (and their associated positive feelings): a) thanksgiving (gratitude) is a form of world-focused cognitive reflection; b) marveling (awe) is a form of world-focused experiential absorption; c) basking (pride) is a form of self-focused cognitive reflection; and d) luxuriating (physical pleasure) is a form of self-focused experiential absorption.

*Savoring beliefs* reflect people's perceptions of their ability to enjoy positive experiences, as distinct from their ability to obtain positive outcomes in the first place. In 2003, Bryant developed the Savoring Beliefs Inventory as a self-report instrument for assessing savoring beliefs, and in 2007, Bryant and Veroff presented a Children's Savoring Beliefs Inventory. Compared to males, females tend to perceive themselves as more capable of savoring positive experiences – a sex difference that emerges as early as 5th grade, persists throughout adulthood, and has been found in the United States, Canada, Australia, and Japan. Comparing levels of savoring beliefs across temporal domains within individuals, people typically report that they are most capable of savoring through reminiscence, moderately capable of savoring the moment, and least capable of savoring through anticipation.

SEE ALSO: ► Capitalization ► Enjoyment ► Positive emotions  
► Positive experience ► Self-regulation

## School Psychology

Patricia A. Lowe and Jennifer M. Raad

*University of Kansas*

School psychology is a profession where individuals apply psychological principles to educational issues. School psychology is a young profession in comparison to the physical sciences. The practice of school psychology did not begin until the turn of the twentieth century. School psychologists work with children, adolescents, families, and school personnel to help students succeed in academic and nonacademic settings. School psychologists collaborate with parents and educational professionals to create positive school environments for all children and youth. These individuals are trained in psychology and education, and their role is to address the educational, behavioral, and socioemotional needs of children and adolescents.

## School Psychologists and Related Professions

The distinction between school, clinical, and counseling psychologists has blurred over the years. Historically, clinical and counseling psychologists worked with adults,



but they had a different focus. Clinical psychologists focused on abnormal behavior and counseling psychologists focused on normal development, adjustment issues, and careers. In contrast, school psychologists worked with children, adolescents and families. Now, many school, clinical, and counseling psychologists with doctorate degrees perform similar duties and may work with the same-age clientele. However, school psychologists are somewhat unique from clinical and counseling psychologists with a specific focus on children and adolescents' educational and learning needs in school settings.

## **Employment Settings for School Psychologists**

School psychologists work in a variety of settings, with the public schools being the most common place of employment. In the public school setting, school psychologists provide direct (e.g., counseling) and indirect (e.g., consultation) services to students, school personnel, parents, and families. Direct services involve directly working with a client, such as a student, whereas indirect services involve working with an individual, such as a parent or teacher, and helping an individual develop skills to work directly with a client. Other school psychologists who work in the public schools have administrative positions. They may serve as a director of school psychological services or a director of pupil personnel services for a school district. School psychologists also work in other settings, including academia, community-based mental health facilities, medical centers, private practice, private schools, residential treatment centers, and state departments of education. In these different settings, they may perform different roles and functions.

## **Roles and Functions of School Psychologists**

The duties performed by school psychologists may vary depending on their work setting. School psychologists may engage in a variety of activities in these different settings. Activities may include assessment, consultation, intervention, prevention, and research and program evaluation. Assessment is one of the major roles performed by school psychologists. School psychologists may conduct comprehensive evaluations in the school setting to determine whether a child or adolescent may benefit from special education and related services, or they may conduct comprehensive evaluations in a nonschool setting for diagnostic purposes. In these comprehensive evaluations, school psychologists may use a variety of formal and informal assessment techniques such as intelligence tests, academic achievement tests, curriculum-based measures, behavior rating scales, classroom observations, and clinical interviews. Consultation is another service that school psychologists may provide. Consultation is an indirect service and involves a consultant (e.g., a school psychologist) working with one or more consultees (e.g., a teacher and/or

parent) to bring about a change in a client (e.g., a student). The consultant and consultee(s) work together using a problem-solving approach to determine the problematic area of concern (e.g., homework completion problems or disruptive behavior in the classroom) and then develop an intervention such as an academic or behavioral intervention that is implemented by the consultee(s) to change the client's behavior. School psychologists may also conduct systems-level consultation. In systems-level consultation, school psychologists may work with an entire organization such as a school or school district to bring about a change in the organization. As systems-level consultants, school psychologists may assist organizations in the development of prevention programs such as alcohol and drug abuse prevention programs. Once developed, these prevention programs are implemented by personnel in the organization. Another role performed by school psychologists is in the area of intervention. School psychologists may work directly with children, adolescents, and/or parents either on an individual basis or in a group setting. For example, school psychologists may provide individual counseling to alleviate a child's anxiety, parent training to assist parents in decreasing their child's noncompliant behavior, and problem-solving skills training to improve a group of adolescents' interpersonal skills. School psychologists may also be engaged in research activities, especially if they work in a university setting. Most school psychologists who work in a university setting conduct research relevant to the educational, behavioral, and socioemotional needs of children, adolescents, and adults. They may also engage in program evaluation research where they evaluate the effectiveness of school programs, for example different reading programs used in the schools. As noted, school psychologists perform a wide range of duties in their work setting and in order to perform these different roles and functions, they need to obtain an advanced degree (i.e., a masters, specialist, or doctoral degree) and participate in continuing professional development.

## **Educational and Training Requirements of School Psychologists**

Training programs in school psychology are found throughout the US. These programs differ in theoretical orientation and models of training. However, general curriculum domains and credit hour requirements of these various training programs are similar. Students who enter into these training programs have at least a bachelor's degree from a university or college. Most students who are admitted to these training programs majored in psychology or education. However, some students received undergraduate degrees in other disciplines.

Although some states allow an individual to be certified or licensed to practice in the schools with a master's degree, other states require a specialist degree. The specialist degree is recognized as the entry level for the practice of school psychology in most cases. According to the standards set forth by the National

Association of School Psychologists (NASP), a professional school psychology organization and an accreditation body, specialist-level training includes 60 semester credits and a 1,200 hour internship. Students who are trained in specialist-level programs typically are required to take two years of course work, including courses in assessment, consultation, intervention, prevention, mental health, learning, child and adolescent development, behavior, and effective teaching, and school-based and sometimes clinic-based experiences, followed by a full-time internship for one academic year or a half-time internship for two academic years in a school setting. Those students who are enrolled in NASP-approved doctoral training programs are required to complete a minimum of 90 semester credits beyond the bachelor's degree and a 1,500 hour internship. The doctoral curriculum would include courses taken by specialist students in addition to advanced courses in such areas as statistics, measurement, and research design, as well as school-based and clinic-based experiences. The doctoral internship may be completed in a school or nonschool setting. However, if a student did not complete a specialist-level internship as defined by NASP standards before the doctoral internship, then the student's doctoral internship must include a minimum of 600 hours of school-based experience. Like NASP's doctoral training standards, the American Psychological Association (APA), a professional organization of psychologists, including school psychologists and another accreditation body, has guidelines for doctoral training programs. Students who are enrolled in APA-accredited doctoral training programs are required to complete three years of full-time study beyond the bachelor's degree and a one-year full-time internship. Some doctoral training programs are both NASP- and APA-accredited and students in these programs follow both NASP standards and APA guidelines in completing their doctoral studies.

## **Credentialing of School Psychologists**

Once students complete their specialist or doctoral degree, they need to apply for the appropriate credentials in order to practice. For specialist and doctoral students who wish to work in a school setting, they will need to apply for a certificate, sometimes referred to as a license, from their State Department of Education in the state where they plan to practice. Endorsement from the training program is usually required for students who graduate from in-state programs. Some states may have additional requirements and students need to be aware of those requirements in the state where they wish to practice. In contrast, students who attended out-of-state programs may be required to submit their transcripts for review by state officials to determine whether the program meets state standards to practice in their state. In addition to the transcript review, students may need endorsement from their training program.

Students with a specialist or doctoral degree may also apply and be awarded the Nationally Certified School Psychologist (NCSP) credential. The NCSP

credential was established by NASP and is a measure of professionalism for those individuals who hold the credential. To be eligible for the NCSP credential, individuals must have graduated from a 60 semester credit hour training program in school psychology, completed a 1,200 hour internship of which 600 hours were in a school setting under a credentialed school psychologist, and pass a national exam. Some states require the NCSP for certification/licensure, whereas other states may grant a certificate or license to an individual who holds the NCSP credential.

For doctoral students interested in working in a nonschool setting, they must apply for a license from a state board of examiners in psychology. To obtain a license, the individual, in most cases, must have a doctoral degree in psychology, two years of supervised experience in the practice of psychology under a licensed psychologist, and pass the Examination for Professional Practice in Psychology (EPPP). A state or provincial jurisprudence exam may also be required. Individuals who obtain a license for the independent practice of psychology from a state board of examiners may provide psychological services to individuals or groups of individuals in a variety of settings such as a medical center, community-based mental health facility, or private practice and are not required to work under the supervision of another licensed mental health professional.

## **Employment Trends and Salaries of School Psychologists**

The current outlook for employment for individuals who earn a degree in school psychology is excellent. A shortage of school psychologists exists throughout the US. The shortage is the result of several factors, including the retirement of many school psychologists who entered the profession shortly after the enactment of the Education for All Handicapped Children Act of 1975. This piece of federal education legislation guaranteed a free appropriate public education for children with disabilities and created positions in the schools for school psychologists to assess children who might be eligible for special education and related services. The current shortage is expected to continue for some time and is most prevalent in the northeastern and midwestern sections of the US. However, many university trainers have noted an increase in the number of applicants applying to school psychology programs. Thus, a steady supply of new school psychologists is expected in the future.

Salaries of school psychologists are influenced by geographical region, state, and school district where they work, type of employment setting, number of years of experience, and educational degree held. Curtis, Lopez, Batsche, and Smith conducted a survey of NASP members during the 2004–2005 school year and found the average salary was \$60,581 for practitioners, university trainers, and administrators working in the US.

## Future Directions for the Profession of School Psychology

The future of the profession of school psychology looks bright, with its strong commitment to children, adolescents, families, and schools. Individuals who pursue a career in school psychology will find it to be a rewarding profession. However, the profession is not without its challenges. The diversity of students who attend US schools has increased, and school psychologists will need to respond effectively in working with students and families from culturally and linguistically diverse backgrounds. Role expansion is another challenge facing the school psychology profession. Although many university trainers, practitioners, and school psychology professional organizations advocate the delivery of comprehensive psychological services in school and nonschool settings, most school psychologists continue to focus on the assessment aspect of service delivery. To meet the future service needs of children, adolescents, families, and schools, school psychologists will need to focus on prevention and promoting wellness of the individuals they serve, become more familiar with the different contexts (home, school, cultural, and societal contexts) that influence children and adolescents' lives, and establish home-school-community partnerships to address the needs of their constituency.

SEE ALSO: ► American Psychological Association ► Counseling psychology ► Developmental psychopathology

## Self-Compassion

Kristin D. Neff and Lindsay M. Lamb

*The University of Texas at Austin*

*Self-compassion* is an open-hearted way of relating to negative aspects of oneself and one's experience that enables greater emotional resilience and psychological well-being. According to the definition proposed by Neff, self-compassion is composed of three key factors: (a) self-kindness – extending kindness and understanding to oneself in instances of perceived inadequacy or suffering rather than harsh judgment and self-criticism; b) common humanity – seeing one's experiences as part of the larger human experience rather than seeing them as separating and isolating; and c) mindfulness – holding one's painful thoughts and feelings in balanced awareness rather than overidentifying with them in an exaggerated manner.

Western psychologists have only recently begun to examine self-compassion, but the construct is central to the 2,500-year-old tradition of Buddhist psychology. Interest in self-compassion has been fueled by a larger trend towards integrating

Buddhist constructs such as mindfulness with Western psychological approaches, exemplified in clinical interventions such as mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy. While mindfulness has received more research attention than self-compassion (with dozens of studies supporting the effectiveness of mindfulness-based interventions), the two constructs are intimately linked. *Mindfulness* refers to the ability to pay attention to one's present-moment experience in a non-judgmental manner. Self-compassion entails holding negative self-relevant emotions in mindful awareness, generating feelings of kindness towards oneself and insight into the interconnected nature of the human experience. There is some evidence to suggest that increased self-compassion may actually help explain the success of some mindfulness-based interventions: for instance, one study found that increased self-compassion levels after participation in a six-week MBSR program mediated reductions in stress associated with the program.

While self-compassion has similarities to the concept of unconditional self-acceptance proposed by humanistic psychologists such as Maslow, Ellis or Rogers, self-compassion is a broader construct. In addition to accepting oneself with kindness and non-judgment, self-compassion entails emotional equanimity and recognition of interconnectedness. Moreover, while self-acceptance may theoretically entail passivity toward personal shortcomings, self-compassion involves the desire to alleviate one's suffering, and is therefore a powerful motivating force for growth and change.

Most research on self-compassion has been conducted using the Self-Compassion Scale (SCS), a self-report measure created by Neff. The scale has strong psychometric properties and demonstrates concurrent, discriminate, and convergent validity (e.g., significant correlations with therapist and partner reports of self-compassion, positive correlations with emotional intelligence and negative correlations with self-criticism). Research suggests that self-compassion is strongly related to emotional well-being. For instance, higher levels of self-compassion have been associated with greater life satisfaction, social connectedness, self-determination, self-concept accuracy and emotional equanimity when confronting daily life events. Self-compassion has also been associated with less anxiety, depression, rumination, thought suppression, and perfectionism. One study, for example, examined how self-compassion levels predicted behavior in a mock job interview task in which participants were asked to write about their greatest weakness. Those scoring higher in self-compassion experienced less anxiety during the writing exercise, and also used more interconnected and less isolating language when discussing their weaknesses.

A study designed to examine the link between self-compassion and other positive psychological strengths found that self-compassion was associated with greater happiness, optimism, positive affect, wisdom, curiosity and exploration, and personal initiative. The study also examined relations with the Big Five personality traits, and found that self-compassion was associated with less neuroticism and more agreeableness, extroversion, and conscientiousness, though self-compassion

was still a significant predictor of psychological strengths when controlling for personality.

Self-compassion appears to be adaptive in academic contexts. Self-compassion is positively associated with mastery goals, which focus on the joy of learning for its own sake, and negatively associated with performance goals, which involve defending or enhancing one's sense of self-worth through academic performances. Research suggests that the link between self-compassion and mastery goals is mediated through the greater perceived competence and lesser fear of failure associated with self-compassion. By not harshly judging the self or blowing one's failures out of proportion, self-compassion engenders self-confidence in one's ability to learn and lessens the self-condemning aspects of failure, which in turn helps to foster mastery goal adoption. Research also indicates that self-compassionate students exhibit more adaptive ways of coping with academic failures.

Self-compassion appears not only to benefit oneself, but also others within interpersonal relationships. In a study of heterosexual romantic partners, self-compassionate individuals were described by partners as being more emotionally connected, accepting and autonomy-supporting while being less detached, controlling, and verbally or physically aggressive. Self-compassion was also associated with more relationship satisfaction (as reported by oneself and one's partner) and greater attachment security. Because self-compassion includes recognition of human connectedness, it allows for caring behavior with partners while reducing the need for ego-defensiveness associated with the desire to control or strike out against others.

In many ways, self-compassion is a useful alternative to the construct of self-esteem, providing similar psychological health benefits while avoiding its more problematic aspects. As Seligman has argued, self-esteem programs tend to emphasize feeling good about oneself rather than building competence, and may hamper the giving of critical feedback to children out of fear of protecting their self-esteem. High self-esteem is often associated with inflated and inaccurate self-concepts, making self-improvement difficult. Individuals may put others down in order to feel better about themselves, with high rather than low self-esteem being associated with narcissism and prejudice. High self-esteem is also associated with anger and aggression towards those perceived to threaten the ego. Because self-esteem is contingent on success in particular domains, it tends to falter in failure situations, leading to unstable feelings of self-worth.

Self-compassion, in contrast, is not based on self-evaluations, social comparisons, or personal success. Rather, it stems from feelings of human kindness and understanding in the face of life's disappointments. For this reason, self-compassion does not require feeling "above average" or superior to others, and provides emotional stability when confronting personal inadequacies. In a large community-based study, it was found that self-compassion displayed a moderate correlation with self-esteem, as should be expected given that both constructs tap into positive self-affect. However, self-compassion was a stronger predictor of healthy self-to-self relating than was global self-esteem, including more stable and less contingent feelings of self-worth, less narcissism, anger, social comparison, and public self-consciousness. In a

series of lab-based studies conducted by Leary and colleagues, self-compassion was also associated with more emotional balance than self-esteem when participants encountered potentially humiliating situations or received unflattering interpersonal feedback. When feelings of self-compassion versus self-esteem were fostered through a mood induction exercise, participants in the self-compassion condition were more likely to take responsibility for their role in painful life events without feeling overwhelmed with negative emotions (as compared to those in the self-esteem or control conditions).

Many theorists assume that high self-esteem is essential to psychological health. For instance, proponents of terror management theory argue that self-esteem is necessary because it provides individuals with a sense of meaning, symbolic immortality, and security that buffers existential anxiety. At the same time, they acknowledge that the need for self-esteem can create a type of ego-defensiveness that may harm relations with others and inhibit growth and change. Self-compassion offers a sense of meaning, belonging and security that is not dependent on bolstering one's ego or on evaluating the self in contrast to others. Rather, it stems from recognizing and feeling tenderness for the shared human experience. Self-compassion provides a caring motivation for personal growth, while reducing the need for distorting, positive illusions about the self.

Given the strong association between self-compassion and mental health, self-compassion is likely to have important applications in clinical settings. The compassionate mind training (CMT) program developed by Gilbert is an intervention program designed for individuals who experience chronic shame and self-criticism. In the program, clients are taught how to be self-soothing and to generate feelings of compassion and warmth towards themselves when they feel threatened, defensive, or self-critical. A pilot study on the effectiveness of CMT found that clients experienced significant reductions in depression, anxiety, self-criticism, shame, inferiority and submissive behaviors.

Researchers are beginning to examine group differences in self-compassion, including variables such as age, gender, and culture. For instance, a recent cross-cultural study compared average levels of self-compassion in Thailand, Taiwan and the United States. It was found that self-compassion levels were highest in Thailand, where original Buddhist teachings on self-compassion are integrated with daily life, and lowest in Taiwan, where there is a strong Confucian emphasis on self-improvement through self-criticism. Americans fell in between these two poles. Self-compassion was associated with interdependent self-construal in Thailand but with independent self-construal in Taiwan and the US. In all three cultures, increased levels of self-compassion were associated with less depression and greater life-satisfaction. Such findings suggest that the prevalence of self-compassion is linked to specific societal features such as parenting practices and philosophical worldviews rather than general East-West differences in culture or self-construals, and that self-compassion may have universal psychological benefits.

SEE ALSO: ► Buddhism ► Mindfulness ► Self-esteem



## Self-Determination

Michael L. Wehmeyer and Todd D. Little

*University of Kansas*

Positive psychology is the pursuit of understanding optimal human functioning and well-being. As Seligman and Csikszentmihalyi (2000, p. 5) observed,

The field of positive psychology at the subjective level is about valued subjective experiences: well-being, contentment, and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present). At the individual level, it is about positive individual traits: the capacity for love and vocation, courage, interpersonal skill, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom.

Ryan and Deci (2000) asserted that in this pursuit for understanding optimal human functioning and well-being, researchers must take into account the agentic nature of human action, noting:

The fullest representations of humanity show people to be curious, vital, and self-motivated. At their best, they are agentic and inspired, striving to learn; extend themselves; master new skills; and apply their talents responsibly. That most people show considerable effort, agency, and commitment in their lives appears, in fact, to be more normative than exceptional, suggesting some very positive and persistent features of human nature. (p. 68)

Self-determination is a general psychological construct within the organizing structure of theories of human agentic behavior. An agentic person is the “origin of his or her actions, has high aspirations, perseveres in the face of obstacles, sees more and varied options for action, learns from failures, and overall, [and] has a greater sense of well being” (Little, Hawley, Henrich, & Marsland, 2002, p. 390). Human agentic theories “share the meta-theoretical view that organismic aspirations drive human behaviors” (Little, Snyder, & Wehmeyer, 2006, p. 61). An organismic perspective views people as active contributors to, or *authors* of, their behavior, which is self-regulated and goal-directed *action*. Such actions are motivated by biological and psychological needs, directed toward self-regulated goals linked to these needs, precipitate self-governance of behavior, and require an explicit focus on the interface between the self and the context.

The construct’s origins lie in the philosophical doctrines of *determinism* and *free will*. Determinism is the philosophical doctrine positing that events, such as human behavior, are effects of preceding causes. Free will is conceptualized as the human capacity to act (or not) as we choose or prefer, without external compulsion or restraint. According to philosophers like John Locke, though, human behavior can be both caused and free, as long as the distinction is made between the agent,

as actor, and the action, as caused. That is, a person (the agent) is free to act or not, as one chooses, even if the action itself is caused by some deterministic factor.

This early focus in personality psychology carried forward into theory in human agentic behavior. Bandura (1997) observed that in discussions of human agency, referents to the term determinism imply the “production of effects by events, rather than the doctrinal sense meaning that actions are completely determined by a prior sequence of causes independent of the individual” (p. 7).

It is this notion of human action as caused or determined by either by the person (the agent) or another factor that became the focus of early psychologists. In *Foundations for a Science of Personality* (1941), Angyal proposed that an essential feature of a living organism is its autonomy, where *autonomous* means self-governing or governed from inside. According to Angyal, an organism “lives in a world in which things happen according to laws which are heteronomous (e.g., governed from outside) from the point of view of the organism” (p. 33). Angyal noted, though, that “organisms . . . can oppose self-determination to external determination” (p. 33), and suggested that the *science of personality* is, fundamentally, the study of two determinants to human behavior, autonomous-determinism (self-determination) and heteronomous-determinism (other-determined).

*Self-determination*, then, as a psychological construct, refers to self- (vs. other-) caused action – to people acting volitionally, based on their own will. *Volition* is the capability of conscious choice, decision, and *intention*. Self-determined behavior is volitional, intentional, and self-caused or self-initiated action.

## Theories of Self-Determination

A number of psychological theories of self-determination have been forwarded. *Self-determination theory* (SDT) merged research on innate human tendencies, social contexts, and motivators for human action to posit congruence between one’s basic needs and core values that spurs individual agency and, ultimately, results in overall well-being. SDT proposed three basic psychological needs – competence, autonomy, and relatedness – that are either supported or challenged by social contexts. The context also contributes to intrinsic and extrinsic motivators that are self-regulated at either conscious or unconscious levels. This perspective views the process of self-regulation as an organizational function that coordinates systemic behaviors and serves as a foundation for autonomy and the sense of self.

In SDT, the inherent psychological need for competence refers to the motivation to be competent and effective within environments, which in turn stems from the theory of effectance motivation, which describes an innate drive for environmental mastery. This drive leads to behavioral responses that sustain and augment individual capabilities. The psychological need for relatedness is the sense of connectedness and belonging with others. This sense is distinct from the status of role-identification or group membership, as the focus is on personal perceptions

of relatedness instead of goal outcomes. Various, competence, relatedness, and autonomy needs may compliment each other, or may conflict.

Satisfying these needs enhances well-being. Within SDT, autonomous actions are based on one's core or "higher order values." Sometimes outside influences (e.g., social context) force values to conflict and a choice must be made that reflects the true self. Intrinsic and extrinsic motivation plays a role here and these motivators are not simply polar opposites. Instead, the rationale and outcome of negotiating and integrating the demands of intrinsic and extrinsic sources of motivation determines the autonomy of an action. Thus, an autonomous action is one in which the rationale behind an action-response (behavior) to an extrinsic pressure reflects one's core values.

Early SDT research focused on the role of social contexts in supporting or thwarting intrinsic motivation and found that conditions fostering autonomy and competence were positively associated with intrinsic motivation. When extrinsically motivated behaviors were acted on, individuals were more likely to integrate the behavior with core values when the social context supported autonomy, competence, and relatedness. Recent SDT research has examined the relationship between implicit/explicit motives (conscious or unconscious) and intrinsic/extrinsic motivation.

Wehmeyer proposed a functional theory of self-determination (fSDT), in which self-determination is conceptualized as a dispositional characteristic (enduring tendencies used to characterize and describe differences between people) based on the *function* a behavior serves for an individual. Self-determined behavior refers to "volitional actions that enable one to act as the primary causal agent in one's life and to maintain or improve one's quality of life" (Wehmeyer, 2005, p. 117). Broadly, *causal agency* implies that it is the individual who makes or causes things to happen in his or her life. Causal agency implies more than just causing action; it implies that the individual acts with an eye toward *causing* an effect to *accomplish a specific end* or to *cause* or *create change*. Bandura noted that:

In evaluating the role of intentionality in human agency, one must distinguish between the personal production of action for an intended outcome, and the effects that carrying out that course of action actually produce. Agency refers to acts done intentionally. (Bandura, 1997, p. 3)

According to fSDT, self-determined *actions* are identified by four essential characteristics: 1) the person acts *autonomously*; 2) the behavior is *self-regulated*; 3) the person initiates and responds to the event(s) in a *psychologically empowered* manner; and 4) the person acts in a *self-realizing* manner. These essential characteristics refer not to the behavior performed, but to the *function* the behavior serves for the individual; that is, whether the action enabled the person to act as a causal agent.

fSDT's use of behavioral autonomy draws from two sources: autonomy as synonymous with individuation and autonomy as roughly synonymous with

independence. Developmental psychologists view the process of individuation, or the formation of the person's individual identity, as a critical component of social and personality development. Individuation is, generally, the progression from being dependent on others for care and guidance to self-care and self-direction, the outcome of which is autonomous functioning or behavioral autonomy.

Self-regulation is:

a complex response system that enables individuals to examine their environments and their repertoires of responses for coping with those environments to make decisions about how to act, to act, to evaluate the desirability of the outcomes of the action, and to revise their plans as necessary. (Whitman, 1990, p. 373)

Zimmerman and Rappaport forwarded the construct of psychological empowerment to account for the multidimensional nature of perceived control, which, according to these authors, had been previously treated as if it were a univariate construct. Through the process of learning, using problem-solving skills and achieving perceived or actual control in one's life (e.g., learned hopefulness), individuals develop a perception of psychological empowerment that enables them to achieve desired outcomes.

The term *self-realization* was used originally by Gestalt psychologists to refer to the intrinsic purpose in a person's life. It also has more global meaning related to the "tendency to shape one's life course into a meaningful whole" (Angyal, 1941, p. 355). People who are self-determined are self-realizing in that they use a comprehensive, and reasonably accurate, knowledge of themselves – their strengths and limitations – to act in such a manner as to capitalize on this knowledge. This self-knowledge and self-understanding forms through experience with and interpretation of one's environment and is influenced by evaluations of significant others, reinforcement, and attributions of one's own behavior.

The primary research focus of fSDT has been on people with intellectual disability, although the theory itself is not specific to people with disabilities. In another theoretical model derived from research in special education, Mithaug suggested that self-determination is an unusually effective form of self-regulation markedly free of external influence in which people who are self-determined regulate their choices and actions more successfully than others. Mithaug suggested that individuals are often in flux between existing states and *goal* or desired states. When a discrepancy between what one has and wants exists, an incentive for self-regulation and action becomes operative. With the realization that a discrepancy exists, the individual may set out to achieve the goal or desired state. Because of a previous history of failure, however, individuals may set expectations that are too low or too high. The ability to set appropriate expectations is based on the individual's success in matching his or her *capacity* with present *opportunity*. Capacity is the individual's assessment of existing resources (e.g., skills, interests, motivation), and opportunity refers to aspects of the situation that allow the individual to achieve the desired gain. Mithaug referred to optimal prospects as "just-right" matches

in which individuals are able to correctly match their capacity (i.e., skills, interests) with existing opportunities (e.g., potential jobs). The experience generated during self-regulation is a function of repeated interaction between capacity and opportunity.

Mithaug (1998) noted that “self-determination always occurs in a social context” (p. 42) and suggests that the “social nature of the concept is worth reviewing because the distinction between self-determination and other-determination is nearly always in play when assessing an individual’s prospects for controlling their life in a particular situation” (p. 42).

Wehmeyer and Mithaug proposed *causal agency theory* (CAT) to explain how and why people become *self-* versus *other-*determined. Wehmeyer and Mithaug refer to the “class of behavioral events” that CAT explains as *causal events*, *causal behavior*, or *causal actions*. These function as a means for the person (the causal agent) to achieve valued goals and, ultimately, become more self-determined. CAT proposes a number of “operators” that lead to self-determined behavior. These operators involve the capability to perform causal actions or behaviors, subdivided into *causal* and *agentic capabilities*. People are “caused” to implement causal and agentic capabilities in response to challenges that serve as catalysts for causal behavior. Causal actions are provoked by two classes of challenges to self-determination: opportunities or threats. *Opportunity* refers to situations or circumstances that provide a chance for the person to create change or make something happen based upon his or her individual *causal capability*. If a person has the causal capability to act on the situation or circumstance, that situation or circumstance can be construed as an opportunity. Opportunities can be *found* (unanticipated, happened upon through no effort of one’s own) or *created* (the person acts to create a favorable circumstance). The second challenge condition involves situations or circumstances that threaten the organism’s self-determination and provoke the organism to exercise causal action to maintain a preferred outcome or to create change that is consistent with one’s own values, preferences, or interests, and not the values, preferences or interests of others. A third operant in CAT is *causal affect*: those emotions, feelings, and other affective components that regulate human behavior, including causal behaviors.

People who are causal agents respond to challenges (opportunities or threats) to their self-determination by employing causal and agentic capabilities that result in causal action and allow them to direct their behavior to achieve a desired change or maintain a preferred circumstance or situation. In response to challenges, causal agents use a *goal generation process* leading to the identification and prioritization of needed actions. The person frames the most urgent action need in terms of a goal state, and engages in a *goal discrepancy analysis* to compare current status with goal status. The outcome of this analysis is a *goal-discrepancy problem* to be solved. The person then engages in a *capacity-challenge discrepancy analysis* in which capacity to solve the goal discrepancy problem is evaluated. The person maximizes adjustment in capacity (e.g., acquires new or refines existing skills and knowledge) or adjusts the challenge presented to create a “just-right match” between

capacity and challenge to optimize the probability of solving the goal discrepancy problem.

Next, the person creates a discrepancy reduction plan by setting causal expectations, making choices and decisions about strategies to reduce the discrepancy between the current status and goal status. When sufficient time has elapsed, the person engages in a second goal discrepancy analysis, using information gathered through self-monitoring to self-evaluate progress toward reducing the discrepancy between current and goal status. If progress is satisfactory, they will continue implementing the discrepancy reduction plan. If not, the person either reconsiders the discrepancy reduction plan and modifies that or returns to the goal generation process to reexamine the goal and its priority and, possibly, cycle through the process with a revised or new goal.

Finally, numerous scholars and theorists provide complimentary views of human agency as a process of self-determination. Recent discussions of self-efficacy, for example, draw upon key concepts that underlie self-determination. Similarly, other theoretical perspectives examine self-determined behavior at either higher or lower levels of analysis. At the lower level, for example, action-control theory examines the perceptions of control from the perspective of behavior as self-determined action. At the higher level of analysis, Snyder's body of work on hope theory emanates from a perspective of self-determined behavior whereby hope is conceptualized as the confluence of agency and pathways thinking – both of which are hallmarks of self-determined behavior.

## Conclusion

That self-determination is a critical construct to the study of a positive psychology seems self-evident. An organismic perspective of self-determination that views people as active contributors to, or “authors” of their behavior, where behavior is self-regulated and goal-directed, provides a compelling foundation for examining and facilitating the degree to which people become “causal agents” in their lives.

SEE ALSO: ► Agency ► Intentional self-development

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## Self-Efficacy

James E. Maddux

*George Mason University*

Self-efficacy beliefs are people's beliefs about their ability to produce desired outcomes through their own actions. These beliefs are among the most important determinants of the behaviors people choose to engage in and how much they persevere in their efforts in the face of obstacles and challenges. Therefore, they also are among the most important determinants of psychological well-being and adjustment. Although the term *self-efficacy* is of recent origin, interest in beliefs about personal control has a long history in psychology. Albert Bandura's 1977 *Psychological Review* article "Self-Efficacy: Toward a Unifying Theory of Behavior Change" formalized the notion of perceived competence as self-efficacy, defined it clearly, and embedded it in a theory of how it develops and influences human behavior.

Self-efficacy beliefs can be distinguished from a number of related concepts. Self-efficacy beliefs are not beliefs about skill; they are beliefs about one's ability to exercise one's skills under certain conditions – especially under changing and challenging conditions. Self-efficacy beliefs are not predictions or intentions about behavior; they are concerned not with what one believes one *will* do but with what one believes one *can* do. Self-efficacy is not self-esteem, although self-efficacy beliefs in a given domain will contribute to self-esteem in direct proportion to the importance one places on that domain. Self-efficacy is not a motive, drive, or need for control. One can have a strong need for control in a particular domain, and still hold weak beliefs about one's ability to perform effectively in that domain. Self-efficacy is not a personality trait. Although measures of general self-efficacy

have been developed and are used frequently in research, they have not been as useful as specific self-efficacy measures in predicting how people will behave under specific conditions.

## The Development of Self-Efficacy Beliefs

The early development of self-efficacy beliefs is influenced primarily by two interacting factors. The first is the development of the capacity for symbolic thought, particularly the capacity for understanding cause-and-effect relationships and the capacity for self-observation and self-reflection. These abilities begin developing in infancy and move from the infant's perception of the causal relationship between events, to his or her understanding that actions produce results, to the recognition that he or she can be the origin of actions that affect their environments. As children's understanding of language increases, so does their capacity for symbolic thought and, therefore, their capacity for self-awareness and a sense of personal agency.

Second, the development of self-efficacy beliefs is influenced by the responsiveness of environments to the infant's or child's attempts at manipulation and control. Environments that are responsive to the child's actions facilitate the development of self-efficacy beliefs, whereas nonresponsive environments retard this development. The development of self-efficacy beliefs encourages exploration, which in turn enhances the infant's beliefs about self-efficacy. The child's social environment (especially parents) is usually the most important part of his or her context. Thus, children usually develop a sense of efficacy from engaging in actions that influence the behavior of other people, which then generalizes to the nonsocial environment. Parents can facilitate or hinder the development of strong self-efficacy beliefs by their responses to the infant's or child's actions and by encouraging and enabling the child to explore and master his or her environment.

Self-efficacy beliefs develop throughout the lifespan as people continually integrate information from five primary sources. The most powerful influences on self-efficacy beliefs are *performance experiences*, one's own attempts to control one's environment. Successful attempts at control that one attributes to one's own efforts will strengthen self-efficacy beliefs for that behavior or domain. Self-efficacy beliefs also are influenced by *vicarious experiences*, or observations of the behavior of others and the consequences of those behaviors. People use these observations to form expectancies about their own behavior and its consequences. People can also influence their self-efficacy beliefs by *imagining* themselves or others behaving effectively or ineffectively in hypothetical situations. Such images may be derived from actual or vicarious experiences with situations similar to the one anticipated, or they may be induced by verbal persuasion, as when a psychotherapist guides a client through interventions such as *systematic desensitization*, a traditional behavioral therapy technique that relies on the person's ability to imagine coping effectively with feared situations and objects. Self-efficacy beliefs



also are influenced by *verbal persuasion* – what others say to a person about what they believe that person can or cannot do. The power of verbal persuasion to affect self-efficacy beliefs will be influenced by such factors as the expertness, trustworthiness, and attractiveness of the source. *Physiological and emotional states* influence self-efficacy when a person learns to associate poor performance or perceived failure with aversive physiological arousal and success with pleasant feeling states. When a person becomes aware of unpleasant physiological arousal, he or she is more likely to doubt his or her competence than if his or her physiological state is pleasant or neutral. Likewise, comfortable physiological sensations are likely to lead people to feel confident in their ability with the situation at hand.

## **The Measurement of Self-Efficacy Beliefs**

As noted previously, self-efficacy is not a trait and should not be measured as such. Instead, self-efficacy measures should be specific to the domain of interest (e.g., social skills, exercise, dieting, safe sex, arithmetic skills). Within a given domain, self-efficacy beliefs can be measured at varying degrees of behavioral and situational specificity, depending on what one is trying to predict. Thus, the measurement of self-efficacy should be designed to capture the multifaceted nature of behavior and the context in which it occurs. Specifying behaviors and contexts improves the predictive power of self-efficacy measures, but such specificity can reach a point of diminishing returns if carried to far. Therefore, the researcher must “know the territory” and have a thorough understanding of the behavioral domain in question, including the types of abilities called upon and the range of situations in which they might be used.

## **The Influence of Self-Efficacy Beliefs**

Self-efficacy beliefs are important in all aspects of human psychological functioning. Four domains are especially important: psychological adjustment; physical health; self-regulation; and psychotherapy.

### **Psychological Adjustment**

Most philosophers and psychological theorists agree that a sense of control over our behavior, our environment, and our own thoughts and feelings is essential for happiness and a sense of psychological well-being. Feelings of loss of control are common among people who seek the help of psychotherapists and counselors. Self-efficacy beliefs play a major role in a number of common psychological problems. Low self-efficacy expectancies are an important feature of depression. Depressed people usually believe they are less capable than other people of

behaving effectively in many important areas of life. Dysfunctional anxiety and avoidant behavior can be the direct result of low self-efficacy beliefs for managing threatening situations. Self-efficacy beliefs also play a powerful role in substance abuse problems and eating disorders. For each of these problems, enhancing self-efficacy beliefs for overcoming the problem and for implementing self-control strategies in specific challenging situations can contribute to the success of therapeutic interventions.

## Physical Health

Self-efficacy beliefs influence health in two ways. First, they influence the adoption of healthy behaviors, the cessation of unhealthy behaviors, and the maintenance of behavioral changes in the face of challenge and difficulty. All of the major theories of health behavior, such as protection motivation theory, the health belief model, and the theory of reasoned action/planned behavior include self-efficacy as a key component. In addition, enhancing self-efficacy beliefs is a part of successful change and maintenance of virtually every behavior crucial to health, including exercise, diet, stress management, safe sex, smoking cessation, overcoming alcohol abuse, compliance with treatment and prevention regimens, and disease detection behaviors such as breast self-examinations.

Second, self-efficacy beliefs influence a number of biological processes which, in turn, influence health and disease. Self-efficacy beliefs affect the body's physiological responses to stress, including the immune system. Lack of perceived control over environmental demands can increase susceptibility to infections and hasten the progression of disease. Self-efficacy beliefs also influence the activation of catecholamines, a family of neurotransmitters important to the management of stress and perceived threat, along with the endogenous painkillers referred to as endorphins.

## Self-Regulation

Research on self-efficacy has added greatly to our understanding of how we guide our own behavior in the pursuit of desired goals. Self-efficacy beliefs influence self-regulation in several ways. First, they influence the goals we set. The stronger a person's self-efficacy in a specific achievement domain, the loftier will be the goals that person sets in that domain. Second, they influence people's choices of goal-directed activities, expenditure of effort, persistence in the face of challenge and obstacles, and reactions to perceived discrepancies between goals and current performance. Strong self-efficacy beliefs are associated with perseverance in the face of difficulties and setbacks. Perseverance usually produces desired results, and this success then strengthens self-efficacy beliefs.

Third, self-efficacy beliefs influence the efficiency and effectiveness of problem-solving and decision-making. When faced with complex decisions, people who

have confidence in their ability to solve problems use their cognitive resources more effectively than people who doubt their cognitive skills. Such efficacy beliefs usually lead to better solutions and greater achievement. In the face of difficulty, people with strong self-efficacy beliefs are likely to remain *task-diagnostic* and continue to search for solutions to problems. People with weak self-efficacy beliefs, however, are likely to become *self-diagnostic* and reflect on their inadequacies. This diminishes their ability to evaluate and solve problems.

## Psychotherapy

The term *psychotherapy* refers broadly to professionally guided interventions designed to enhance psychological well-being. Different psychological interventions, or different components of an intervention, may be equally effective because they equally enhance self-efficacy for crucial behavioral and cognitive skills. The success of psychological interventions can be enhanced by arranging experiences designed to strengthen self-efficacy beliefs for specific behaviors in specific problematic and challenging situations. Some basic strategies for enhancing self-efficacy beliefs are based on the five sources of self-efficacy previously noted.

## Performance Experience

When people see themselves coping effectively with difficult situations, their sense of mastery is likely to be heightened. For example, the most effective interventions for phobias and fears involve gaining gradual experience with the feared object or situation during therapy sessions or between sessions as homework assignments. Recent advances in computer technology now allow for the use of virtual reality experiences in the treatment of phobias and fears. In cognitive treatments of depression, clients are provided structured guidance in arranging success experiences that will counteract low self-efficacy expectancies.

## Vicarious Experience

Vicarious learning and imagination can be used to teach new skills and enhance self-efficacy for those skills. For example, modeling films and videotapes have been used successfully with people who have phobias. Research has shown that changes in self-efficacy beliefs for approaching feared objects and situations lead to adaptive behavioral changes. Common everyday (nonprofessional) examples of the use of vicarious experiences to enhance self-efficacy include advertisements for weight-loss and smoking cessation programs that feature testimonials from successful people. The clear message from these testimonials is that the listener or reader also can accomplish this difficult task. Formal and informal support groups – people sharing their personal experiences in overcoming a common adversity such as addiction, obesity, or illness – also provide forums for the enhancement of self-efficacy.

### Imagined Experience

Imagining ourselves engaging in feared behaviors or overcoming difficulties can be used to enhance self-efficacy. For example, cognitive therapy of anxiety and fear problems often involves modifying visual images of danger and anxiety, including images of coping effectively with the feared situation. Systematic desensitization, noted previously, relies on the person's ability to imagine coping effectively with a feared situation. Because fearful and depressive images are important components of anxiety and depression, various techniques have been developed to help clients modify and reduce these images and to replace them with more positive images.

### Verbal Persuasion

Most formal psychological interventions rely strongly on verbal persuasion to enhance a client's self-efficacy and encourage small risks that may lead to small successes. In cognitive and cognitive-behavioral therapies the therapist engages the client in a discussion of the client's dysfunctional beliefs, attitudes, and expectancies and helps the client see the irrationality and self-defeating nature of such beliefs. The therapist encourages the client to adopt new, more adaptive beliefs and to act on these new beliefs and expectancies. As a result, the client experiences the successes that can lead to more enduring changes in self-efficacy beliefs and adaptive behavior. People also rely daily on verbal persuasion as a self-efficacy strengthener by seeking the support of other people when attempting to lose weight, quit smoking, maintain an exercise program, or summon up the courage to confront a difficult boss or loved one.

### Physiological and Emotional States

People usually feel more self-efficacious when they are calm than when they are aroused and distressed. Thus, strategies for controlling and reducing emotional arousal (specifically anxiety) while attempting new behaviors should enhance self-efficacy beliefs and increase the likelihood of successful implementation. Hypnosis, biofeedback, relaxation training, meditation, and medication are the most common strategies for reducing the physiological arousal typically associated with weak self-efficacy beliefs and poor performance.

### Collective Efficacy

Accomplishing important goals in groups, organizations, and societies has always depended on the ability of individuals to identify the abilities of other individuals and to harness these abilities to accomplish common goals. This idea is captured in the notion of *collective efficacy*, the beliefs that people in a group hold about

their ability to work together effectively to accomplish shared goals. Collective efficacy has been found to be important to a number of settings and groups. The more efficacious couples feel about their ability to accomplish important shared goals, the more satisfied they are with their relationships. The collective efficacy beliefs of an athletic team can be raised or lowered by giving them false information about ability and can influence its success in competitions. The collective efficacy beliefs of teachers can affect the academic achievement of school children. The effectiveness of self-managing work teams also seems to be related to collective efficacy beliefs. Collective efficacy beliefs also can be important in people's attempts to create social and political change. Individual success and happiness depends to a large degree on the ability to cooperate, collaborate, negotiate, and otherwise live in harmony with other people. In addition, the ability of businesses, organizations, communities, and governments (local, state, and national) to achieve their goals will increasingly depend on their ability to coordinate their efforts, particularly because these goals often conflict. In a world in which communication across the globe is often faster than communication across the street, and in which cooperation and collaboration in commerce and government is becoming increasingly common and increasingly crucial, understanding collective efficacy beliefs will become increasingly important.

SEE ALSO: ► Bandura, Albert ► Self-regulation

## Self-Esteem

John P. Hewitt

*University of Massachusetts*

*Self-esteem* is the evaluative dimension of self-regard, combining a cognitive and an affective aspect. People acquire knowledge of themselves, organized into schemas derived from direct experience as well as the real or imagined judgments of others. And they respond emotionally to this knowledge. They feel about themselves essentially the same range of affect that they are capable of directing toward any object. Fear, anger, hatred, love, pride, satisfaction, anxiety, loathing, shame, guilt, embarrassment, and other named emotions which may figure in the experience of self. Self-esteem may exist as a global sense of worth or value; it may be felt in relation to particular accomplishments or spheres of competence; and it may be experienced in relation to the person's real or desired membership in racial, ethnic, or other collectivities, with a sense of worth derived from identification with them.

Social scientists most commonly emphasize global self-esteem, measuring it by asking individuals to agree or disagree with self-referential statements. Typical of self-esteem measures, and still the most widely used, is the ten-item global scale developed by Morris Rosenberg (Rosenberg, 1965, pp. 305–307):

1. On the whole I am satisfied with myself.
2. At times I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times.
7. I feel that I am a person of worth, at least on an equal plane with others.
8. I wish I could have more respect for myself.
9. All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

Such statements elicit cognitive and affective responses to the self. By scaling responses to such items, researchers create self-esteem scores for individuals and examine their relationship with other variables in an effort to discern the antecedents and consequences of various levels of self-esteem.

Self-esteem is an intensively studied topic, not only in academic psychology and sociology but also in such applied fields as education, social work, clinical psychology, and psychiatry. Although the psychologist William James wrote about self-esteem in the nineteenth century, researchers began intensive study of its origins and consequences only during the last third of the twentieth century. During the same period self-esteem became the focus of a “self-esteem movement,” which advanced the notion that an epidemic of low self-esteem was responsible for many social and personal problems – such as delinquency, poor school performance, and drug use. Proponents argued that these problems could be alleviated by programs, especially in schools, specifically designed to raise self-esteem. The psychological concept of self-esteem thus became imbued with broader cultural meanings, and it is often difficult to separate one from the other.

## The Nature of Self-Esteem

We can best examine the interlinked psychological and cultural meanings of self-esteem by considering it as a *socially constructed emotion*. Placing self-esteem within the realm of socially created emotions fosters consideration of its cultural meanings while also recognizing its underlying visceral, physiological, and neurological correlates. Not simply universal psychological states, socially constructed emotions are created when social expectations and cultural meanings are laid over universal affective responses to experience. Self-esteem is a reflexive emotion that arises in response to the person’s own thoughts and actions. It has developed over time in social processes of invention, which over the past century have been strongly influenced by scientific psychology and its advocates and popularizers. Individuals must *learn* to experience and to talk about self-esteem, which, like other emotions, arises in predictable social circumstances and is subject to social control.

The key term for grasping the socially constructed emotion of self-esteem is *mood*, which is a generalized aroused or subdued disposition. At one end of a mood continuum, *euphoria* is a pervasive good feeling that the individual might describe in such terms as energized, happy, "psyched," self-confident, or elated. At the other extreme, *dysphoria* is a feeling described in such opposite terms as listless, sad, fearful, anxious, or depressed. In a positive mood, the individual is aroused, organized, and ready to act; in a negative mood, the individual is reserved, fearful, and reluctant to act. Mood is a normal animal response to experience, promoting activity when success seems likely and restraining or cautioning it in the face of potential failure or harm. For human beings, culture provides the words and ideas that label and interpret mood, transforming it into a more or less self-conscious experience.

Batson's distinction between *affect*, *mood*, and *emotion* helps explicate the relationship between self-esteem and mood. *Affect*, which is the most general and primitive of the terms, tells the organism about the more and less valued "states of affairs" it experiences. Events leading to valued states of affairs produce positive affect, whereas events leading to less valued states produce negative affect. *Mood*, in contrast, entails more or less well-formed *expectations* about the future experience of positive or negative affect. Mood thus refers to "the fine-tuning of one's perception of the general affective tone of what lies ahead" (Batson, 1990, p. 103). *Emotions* are oriented to the present and are focused on the person's relationship to a specific goal. The person in a positive mood expects more positive affect in the future. The person experiences the emotion of joy in the present as his or her goals are attained or attained more fully than imagined. Likewise, the socially constructed emotion of self-esteem arises as the person interprets mood in relation to feelings about the self. High self-esteem entails positive mood and the perception of an efficacious and socially valued self. Low self-esteem entails the opposite – negative mood and a self that is incapable and socially at risk.

Variations in mood are describable by a variety of culturally provided terms, which vary both across historical periods and from one situation to another. The contemporary individual has access to the social machinery of psychiatry and its array of diagnostic categories, therapies, and medicines; to religious interpretations that emphasize sin and repentance over medicine; to political ideologies that emphasize personal responsibility and eschew scientific causal explanations of conduct; and, of course, to scientific and popular ideas that view self-esteem as central to personal satisfaction and social responsibility. People tending toward euphoria may report that they are "happy," "excited," or "self-confident," or that they "feel good" or are "in a good mood." They may respond to self-esteem measures in ways that lead a social scientist to attribute high self-esteem to them. They may see themselves in terms of religious ecstasy. They may strike a psychologist or psychiatrist as healthy or, if too euphoric, as manic. And if they have access to the discourse of self-esteem, as nearly everyone nowadays does, they may say that they have high self-esteem and thus experience the socially created emotion of self-esteem.

## Origins of Self-Esteem

Self-esteem is thought by contemporary behavioral scientists and laypersons alike to be rooted in four conditions – acceptance, evaluation, comparison, and efficacy. Self-esteem is believed to depend on unqualified acceptance of the child early in life, the provision of positive evaluations by significant others, favorable comparisons with others and with an ideal self, and the capacity for effective conduct. It is thought to require the child's acceptance within the social fold and to be built early in life on a foundation of security, trust, and unconditional love. Later, positive evaluations enhance self-esteem and negative evaluations damage it. Likewise, self-esteem is enhanced when the person is able to make favorable comparisons with other people or with an ideal self, and also when the person acts effectively in his or her world.

Both the idea of self-esteem and the science that has created it are deeply embedded in and in some ways mirror American culture. This culture makes the individual responsible for creating a social world or finding a place in an existing one. It is the individual who must develop friendships, establish an occupational or professional network, or find a mate or life partner. Likewise, American culture exposes the individual to numerous situations of evaluation by self and others. Children earn grades for academic work, get cheers or jeers for their athletic or musical accomplishments, and are assigned to "popular" or "unpopular" peer groups. Adults are evaluated for their appearance and work performance, and think about their success or lack of it in comparison with their peers. Parents compare their own children with those of their friends and strive to "keep up with the Joneses". And it is the individual who must act independently and effectively.

American culture does not, however, present a consistent set of expectations. The social world often is portrayed as an interpersonal oyster for the individual to crack and enjoy, but Americans also look wistfully for places where acceptance is guaranteed and "everybody knows your name." Schools apply evaluative criteria unevenly, sometimes enforcing academic standards weakly while requiring talent and hard work for membership on the varsity football squad or the school chorus. Children are told to work hard, but also that they are entitled to feel good about themselves no matter how well they do and that failure does not make them less worthy human beings. Finally, a communitarian impulse in American culture often works against its intense individualism. Sometimes people are urged to base their estimate of self-worth simply on their membership in a group and to take personal pride from group accomplishments.

This ambivalence about acceptance, evaluation, comparison, and efficacy arises from several fault lines in American culture. Americans feel entitled to the "pursuit of happiness" and believe that each person deserves a chance at success. But happiness and success are ambiguous, ill-defined qualities. Happiness is defined both as future enjoyment earned by individual effort and as contentment with one's place in life. Everyone deserves a chance at success, but for some it is social



and financial advancement, and for others the contented application of effort to a vocation even without hope of fame or fortune. Americans are also ambivalent about equality. Sometimes they emphasize equality of opportunity, believing that each person should have a fair start in life and obey the same rules on a level playing field. But Americans also sometimes emphasize equality of condition or outcome, with happiness and success defined as entitlements of membership in the society rather than as prizes to be sought and won.

Differing meanings of self-esteem reflect these contrasting meanings of success, happiness, and equality. One set of meanings views self-esteem as a privilege to be achieved by displaying socially appropriate attitudes and engaging in hard work. The other set views self-esteem as an entitlement requiring no changes in behavior or attitudes. Indeed, the individual is held able to bootstrap himself or herself to self-affirming feelings.

The language of self-esteem transforms deeply rooted cultural issues into personally relevant questions: Do others like or respect me? Am I as happy or as successful as I could be? Do I deserve to think better of myself than I do? How can I feel better about me? What must I do to feel better? How can I justify the way I feel about myself? For those in *pursuit* of happiness and success and who feel themselves well along on the path, self-esteem is a way of characterizing – and experiencing – their positive feelings about their lives. For those who feel themselves falling behind in the quest, talk of earning self-esteem motivates further effort. In contrast, those who favor communitarian definitions of self, as well as those whose future-oriented quest for success and happiness has faltered, also can find reassurance in the discourse of self-esteem. “I have the right to feel good about myself,” one might say, “because friends and family value me for virtues that are more important than financial success. I am content with my life and with myself.”

Whichever version of self-esteem is emphasized, it is a culturally important emotion, perhaps even a necessary one, since it expresses and resonates with important cultural dilemmas. By creating the concept of self-esteem and providing the knowledge and ideas for a popular discourse about it, social scientists thus inadvertently create what Michel Foucault called “technologies of the self,” manufacturing the very terms and instruments whereby the self is experienced. They have been joined in this effort by legions of “conceptual entrepreneurs” who market the idea of self-esteem as well as techniques for its improvement.

## **The Consequences of Self-Esteem**

In spite of considerable scientific and entrepreneurial effort devoted to its study and promotion, there is little evidence that efforts to enhance self-esteem provide significant leverage in improving individual well-being or solving social problems. Studies of the distribution of self-esteem suggest that there is neither an epidemic of low self-esteem nor an outbreak of unearned high self-esteem. Low self-esteem is not the cause of such social problems as poor academic achievement, drug abuse, or teenage pregnancy, nor is the improvement of self-esteem a remedy for these

conditions. And although no one would maintain that low self-esteem is desirable, it can be argued that high self-esteem is not an unqualified good.

An exhaustive review of self-esteem research has made clear that the effects of self-esteem are generally far less impressive than proponents of the self-esteem movement have claimed. Although high self-esteem is positively and strongly related to happiness, they found it is “not a major predictor or cause of almost anything” (Baumeister, Campbell, Krueger, & Vohs, 2003, p. 37). (The sole major exception is that high self-esteem appears to insulate girls from bulimia.) Self-esteem correlates most strongly with *subjective* perceptions of success, intelligence, likeability, and attractiveness. Thus, they report, “people with high self-esteem seem sincerely to believe they are smarter, more accomplished, more popular and likeable, and more attractive than other people” (p. 37). But such self-perceptions are not borne out in the judgments of other people; people with high self-esteem are not thought by others to be smarter, more successful, or more likeable. When objective measures of outcomes, such as school performance, are employed, correlations with self-esteem become much smaller. And the evidence suggests that high self-esteem is a result of good school performance, not a cause of it.

Moreover, self-esteem may not be the unqualified good that its proponents claim. High self-esteem does seem to enable people more readily to speak up in groups, and to take the initiative. But it also seems to dispose people to regard members of their own group as preferable to outsiders, and thus may promote prejudice and discrimination as readily as group pride. Moreover, high self-esteem is not a homogeneous attribute. The relatively high measured self-esteem of some individuals reflects a reasonably accurate picture of how they view their strengths and accomplishments. But others respond defensively to self-esteem measures, and thus only appear to have high self-esteem because they are so strongly motivated to deny they have any negative qualities. Others are merely conceited, with highly inflated self-perceptions, and some are narcissistic. Finally, while high self-esteem fosters initiative and independence from the group, it also renders the person less susceptible to influence by group norms and expectations.

The value of self-esteem is thus less than previously thought. High self-esteem is associated with the pleasant feelings we call happiness and with the fostering of initiative. But there is no convincing reason to believe that raising self-esteem by itself is a useful means of improving the quality of the individual's life or solving social problems. With the important qualification that some manifestations of high self-esteem are the result of defensive tactics, conceit, and narcissism, high self-esteem is best conceived as an *indicator* of the individual's mental health, well-being, and social capabilities rather than as a desirable goal or end state in itself. Conditions that promote optimal human functioning also promote self-esteem, and these fundamental conditions are the ones worth pursuing: acceptance within a social fold, a sense of security, cultural competence, and the capacity to reconcile personal goals and social expectations.

SEE ALSO: ► Affective forecasting ► Collective self-esteem ► Emotions  
► Happiness ► Individualism

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## Self-Monitoring

David V. Day<sup>a</sup> and Deidra J. Schleicher<sup>b</sup>

<sup>a</sup>*Singapore Management University*; <sup>b</sup>*Purdue University*

*Self-monitoring* personality was introduced into the psychological literature more than three decades ago by Mark Snyder as a dispositional construct reflecting differences in the extent to which individuals monitor their self-presentations, expressive behavior, and nonverbal affective displays. High self-monitors are generally more flexible and pragmatic in their interpersonal orientations, adopting social interaction patterns that promote fitting in and meeting others' expectations. As such, they have sometimes been labeled as "chameleons." Low self-monitors are regarded as generally more principled in their interactions in that they are more likely to display a high correspondence between their emotions or attitudes and their behavior. These individuals are very consistent and predictable in terms of acting in accord with their beliefs, and thus operate according to the philosophy of "to thine own self be true." Self-monitoring is considered to be relatively enduring over time and captures aspects of both the motivation and ability to monitor verbal and nonverbal behavior in social situations.

From this early conceptualization, self-monitoring has evolved in meaning. Specifically, the concept has been elaborated to reflect differences in: a) how high and low self-monitors think about and organize the social world around them; b) the types of interpersonal strategies that are adopted by high and low self-monitors; and c) how high and low self-monitors construct aspects of their identity to make sense of themselves and their social relationships. The most recent conceptualization is that self-monitoring reflects individual differences in the tendency to engage in or avoid certain forms of image and impression management. That is, high self-monitors embrace impression management as a way of enhancing their own personal status (status enhancement motive), whereas low self-monitors are more concerned with making sure that their true self is portrayed as accurately as possible in social situations (self-congruency enhancement motive).

The popularity of self-monitoring as a focus of both basic and applied research is evident in the number of different areas in psychology in which it has been

examined. The construct of self-monitoring emerged from the literature in social psychology and has been especially associated with the disciplinary subareas of social interactions and close relationships such as friendships, romantic relationships, and marriage. Research in these areas has generally found that high self-monitors are likely to have more interpersonal relationships that are less committed and intimate in nature, whereas low self-monitors are likely to have fewer relationships, although these relationships are characterized by deeper levels of commitment.

Other disciplines in which self-monitoring has received substantial attention include consumer psychology (such as the differential reactions of high and low self-monitors to specific advertising approaches) and industrial/organizational psychology (in terms of the role of self-monitoring in work and organizational contexts). The latter includes empirical studies linking self-monitoring with job attitudes, job performance and organizational advancement, and leadership.

It is also the case that there is conceptual and empirical overlap between self-monitoring personality and a number of variables studied in the positive psychology literature such as subjective well-being, job and life satisfaction, self-esteem, positive affectivity, authenticity, resilience, and empathy. Thus, self-monitoring personality has important implications for the study of positive psychology. Although the empirical findings in these areas are somewhat inconsistent and complex, there appears to be substantial evidence to support the general conclusion that there are positive characteristics associated with both high and low self-monitors. For example, in the authenticity literature, it has been noted that although low self-monitors are more likely to be true to themselves and more sincere, high self-monitors have more flexibility to cope with the increasing diversity of social roles. Similarly, in terms of job-related well-being (composed of job satisfaction, job involvement, and organizational commitment), meta-analyses have indicated that although low self-monitors are likely to have higher levels of organizational commitment, it is high self-monitors who tend to have greater job involvement (no consistent differences have been found with regard to job satisfaction). The list of positive characteristics that low self-monitors may be more likely to possess include greater sincerity and authenticity, more principled behavior, an internal locus of control, higher self-esteem, and greater commitment to friends, relationship partners, and employing organizations. High self-monitors, on the other hand, are likely to have higher levels of extroversion, agreeableness, and positive affectivity (they not only express but also evoke higher levels of positive affect in their interpersonal relationships), greater interpersonal, social, and communication skills, more flexible orientations that allow them to face change with greater resilience and optimism, greater confidence in their judgments, better job performance (particularly in sales positions), and increased likelihood of emerging as leaders.

Self-monitoring has been examined in a number of contexts and has been found to relate to a number of important variables, including those in the positive psychology domain. It is likely that research in these areas will continue in the future,

taking into account the challenges and controversies surrounding self-monitoring that are reviewed in the following section. One of the more pressing needs for future research in this area is to become more focused on low self-monitors, as much less is known about the characteristics and behavioral outcomes of low self-monitors than high self-monitors. Similarly, there is a need for continued research and debate on the question of whether low self-monitors lack the ability, or merely the motivation, to monitor their social behavior.

## Challenges and Controversies in Measuring Self-Monitoring

The major controversies associated with self-monitoring concern its measurement, including its scoring and dimensionality. The most popular measurement instrument is the Self-Monitoring Scale (SMS), which has been revised from 25 items to an 18-item format. The recommended scoring format according to Snyder is true-false responses for each item, and the scale is keyed such that higher scores indicate a higher self-monitoring tendency. It has also been argued that self-monitoring personality is a *discrete class variable*, as opposed to a continuous variable, meaning that respondents can be classified discretely as a low self-monitor (scores of 10 and below on the 18-item SMS) or as a high self-monitor (scores above 11), rather than falling along a self-monitoring continuum. This idea in particular has been controversial among researchers. However, meta-analytic findings suggest that relationships between self-monitoring and work-related constructs at least do not differ significantly if self-monitoring is measured or scored in a continuous (as opposed to discrete) manner.

The SMS was originally composed of the subcomponents of *extroversion* (e.g., “In a group of people I am rarely the center of attention,” reversed scored), *acting* (e.g., “I would probably make a good actor”), and *other-directedness* (e.g., “I would not change my opinions . . . in order to please someone or win their favor,” reverse scored). Based on extensive factor analyses, some researchers have questioned whether the self-monitoring construct as measured by the SMS would be better represented by two, not three, subcomponents, or whether one general factor underlies individual differences in self-monitoring. The most recent analysis of the evidence suggests that there is a conceptually meaningful general self-monitoring construct that relates to other constructs differently as compared with its subcomponents of extroversion, acting, and other directedness. Because of the questions raised about the self-monitoring construct and its measurement, other researchers, most notably Lennox and Wolfe, have suggested an alternative theoretical model for self-monitoring, along with a revised measurement scale.

SEE ALSO: ► Agreeableness ► Authenticity ► Life satisfaction  
► Meaning

## Self-Regulation

James E. Maddux  
George Mason University

The study of self-regulation is concerned with understanding how people go about trying to accomplish valued goals and how and why they succeed or fail. The term *self-regulation* is often viewed as synonymous with *self-control*, implying that people can exercise some degree of voluntary control over their behavior, feelings, and thoughts. The term self-regulation, however, is usually used to refer to self-control that is directed toward a valued goal, especially a goal that extends beyond the immediate situation. Of course, to assume that humans *can* exercise control over their own behavior is not to assume that human behavior is always or even usually under intentional control but only that people are capable of controlling their own behavior in the pursuit of valued goals. Even currently automatic, habitual, or seemingly mindless behavior may have been at one time deliberate, mindful, and intentional.

People are usually more satisfied with their lives when they believe that they are making good progress in moving toward valued goals. For this reason, effective self-regulation is crucial to psychological adjustment and well-being. In addition, ineffective self-regulation can lead to serious psychological problems, including depression and anxiety disorders. This is not to say, however, that the happy and psychologically healthy person is one who is capable of exerting perfect control over his or her behavior, feelings, and thoughts at all times. Self-regulation in the pursuit of perfectionistic, unrealistic, or unhealthy goals can lead to unhappiness and dissatisfaction with life, as when the pursuit of the “perfect” body leads to eating disorders or to excessive worry about normal physical imperfections.

When most people think of a person’s ability control his or her own behavior, they think of the concept of *willpower*. People commonly say such things as “I just can’t control my eating. I have no willpower.” or “You were able to lose 20 pounds in three months? I sure wish I had your willpower.” In such statements, willpower is viewed as a fixed and unchanging property of the person – similar to the way that many people view intelligence or a personality trait – that each person has a certain amount of and that determines each person’s ability to control his or her behavior. The problem with the notion of willpower is that it sounds like an explanation but really it is not. Someone observes another person’s success at losing weight and attributes that success to the person’s willpower. The only evidence for the person’s willpower, however, is the person’s success at losing weight. For this reason, explaining the person’s success by referring to the person’s willpower explains nothing. What were not observed were the person’s decision-making processes concerning how much weight to lose and by when to lose it and the person’s plan for doing so. What were not observed were the

hundreds or thousands of decisions the person made about his and her food consumption (not to mention exercise) in hundreds or thousands of situations over a period of weeks, months, or even years. What were not observed were the trials and errors of various strategies for reducing food intake and resisting temptation and how the person learned to deal with challenges and setbacks along the way, including the distressing emotions that often accompany attempts to accomplish a difficult goal. What were not observed were the ways in which the person's confidence gradually strengthened along the way and how this confidence influenced the person's ability to deal with challenges and setbacks. Essentially, what were not observed were the specific self-regulation *skills* and *strategies* that the person employed in the attempt to lose weight.

It is these specific skills and strategies that are the topic of theories and models of self-regulation. Unlike willpower, self-regulation is viewed not as a fixed and unchanging property of the person but as a set of skills that can be learned, can be improved through practice, and can be adapted from one situation to another. Numerous models of self-regulation have been proposed over the past several decades. Taken together, these models identify ten components of self-regulation: a) goals – what a person is either trying to accomplish or trying to avoid; b) plans – the person's strategy for accomplishing the goals; c) self-efficacy beliefs – the person's confidence in his or her ability to implement specific aspects of the plan; d) standards of evaluation – the person's "yardstick" for measuring progress along the way; e) goal-directed action – actual attempts to implement specific aspects of the plan; f) self-monitoring – observing one's behavior and the impact of one's behavior on progress toward a goal; g) feedback – information about progress toward a goal (as compared to standards of performance) that people either gather themselves or that is provided by other people or automatically by the situations (e.g., a computer video game); h) self-evaluation – judgments about one's progress toward a goal; i) emotional reactions to these evaluations; and (j) corrective action – attempts to change one's behavior to move oneself toward one's goal more efficiently based on feedback, self-evaluation, and emotional reactions. Self-regulation does not, of course, consist of an invariable sequence of ten steps, beginning with a goal and ending with correction action. Instead, self-regulation consists of a number of *components* that interact continually in complex ways.

As the above list of self-regulation components indicates, human self-regulation is a complex process. One way to get a better idea of how it works is to understand the operation of a *cybernetic device* – a self-regulating system or machine such as a guided missile or a robot. A simple thermostat provides a good example of a cybernetic device. A thermostat may be programmed to maintain the temperature of a room at 72°F. The thermostat's *goal* is 72°F. The thermostat can also be set to be alert for deviations from 72°F of a certain magnitude – its *standard of evaluation*. The thermostat continually collects information or *feedback* about the temperature of the environment. The thermostat then compares this information with the standard – a process of *self-monitoring*. If the thermostat detects

a sufficiently large discrepancy between the room's temperature and the standard, it then sends a signal that turns the heating or cooling unit on, depending on the direction of the discrepancy (i.e., warmer vs. cooler than the reference criterion) – the goal-directed *action*. The result of this action is a reduction of the discrepancy between the perceived room temperature and the goal of 72°F. When the thermostat senses that the goal has been attained, it sends a signal that turns the heating or cooling unit off. As long as the thermostat does not detect a sufficiently large discrepancy between the room temperature and the reference criterion (72°F), it will do nothing. However, when the thermostat once again detects a discrepancy, it sends a signal that turns the heating or cooling unit on. If the thermostat is reset for 74°F, it will have a new goal that it will work to attain and maintain.

Perhaps the human behavior that most resembles the operations of a cybernetic device and that is familiar to most people is driving an automobile. Driving usually begins with a goal – getting from point A to point B quickly but also safely. Of course, this situation already presents a complication not presented by the thermostat – a conflict between goals, because driving quickly may be incompatible with driving safely. Under relatively good conditions (clear weather, good roads, moderate traffic) and in familiar territory (e.g., driving to work for the 1,000th time), the driver behaves much as the thermostat does and behaves almost as automatically as does the thermostat. The driver has a goal (getting from A to B) and has standards of evaluation in that the driver, like the thermostat, is alert for deviations from the goal of a certain magnitude, such as drifting too close to the curb or the middle of the road or approaching the car in front too quickly or too closely. The driver constantly gathers information or feedback about how well he or she is doing in maintaining these standards and constantly self-monitors his or her deviations from these standards. If the driver detects a sufficiently large discrepancy between the current situation and the standard (e.g., drifting too close to the middle line), then the driver performs an action to reduce this discrepancy (e.g., a slight turn of the wheel to the right). Even in a short drive of a few miles, an experienced driver will make thousands of these automatic adjustments in pursuit of the goal of arriving from point A to point B relatively quickly but also safely.

The “driver-as-cybernetic-device” analogy holds up fairly well as a model of human self-regulation as long as the driving conditions are fairly good, the terrain and route fairly familiar, and the driver fairly confident and calm. But because people are thinking and feeling beings, driving can easily become more complicated than the operation of a thermostat. Consider the driver who is late for an important appointment. This driver may be preoccupied with thoughts about the consequences of being late for the appointment and therefore may self-monitor his or her behavior and collect feedback about his or her driving less efficiently than otherwise. The driver's reaction time and thus his or her ability to quickly engage in discrepancy-reducing action may be impaired. If this hurried and anxious driver also is driving in unfamiliar territory, he or she will have the added distraction of



having to pay closer attention to the surroundings (e.g., looking for exit ramps and street signs) and the anxiety that results from not being quite sure how to get to where one wants to go. Bad weather could produce additional distractions and additional anxiety. If the driver tries to use the cell phone to call the person with whom the appointment is, there is another major distraction with which to deal. If the driver is unaccustomed to driving in bad weather in unfamiliar territory, he or she may have little confidence in the ability to drive under these conditions. This lack of confidence can result in anxiety, which can further hinder performance. The driver may be hungry and may suddenly decide that the goal of satisfying hunger is more important than the goal of arriving on time for the appointment (the temptation of competing situational goals). There may even be a decision not to go to the appointment because of extreme anxiety about the appointment.

It is easy to understand, therefore, how human self-regulation can become more complicated than the operation of even the most complex cybernetic device. These complications are the result of several major differences between machines and people. First, although a cybernetic device has goals, it does not choose its goals, nor can it choose to reject them. Humans often are assigned goals (e.g., in the workplace) but can decide to reject them or work on them only half-heartedly while giving the appearance of working diligently. Cybernetic devices begin with an established goal and then operate automatically to attain and maintain the goal. Machines, unlike people cannot “fake it.” Regardless of their complexity and their ability to self-regulate once set into action, not even the most sophisticated self-regulating devices (e.g., robots) design themselves or set themselves into action – at least not yet. They initially depend on human goal-directed behavior and human self-regulation. When they malfunction, they depend on humans to fix them.

Second, cybernetic devices do not make their own plans. Human beings make plans and install them in machines. Third, cybernetic devices do not develop self-efficacy beliefs – beliefs about their ability to accomplish their goals – that can change with time and experience and can influence their ability to function effectively. Fourth, machines do not have self-esteem. Although cybernetic devices can measure their progress toward a goal, they cannot evaluate themselves as good or bad or strong or weak based on how well or how quickly they believe they are accomplishing their goals. Finally, machines do not feel. Cybernetic devices (even the most sophisticated computerized robots) lack the human capacity for emotion. Research has demonstrated that a person’s evaluation of his or her progress toward a valued goal produces emotional reactions (e.g., anxiety, sadness, satisfaction, joy) and that these emotional reactions can either facilitate or disrupt self-regulation. Likewise, because self-regulation requires effort and can be emotionally taxing, self-regulatory efforts in one situation (e.g., not eating those additional cookies) can leave the person temporarily depleted or less able to exert his or her self-regulatory skills in a new situation (e.g., studying for an exam.) Machines do not become tired or depleted in this same way.

Therefore, a model of *human* self-regulation must allow for self-set goals, self-made plans, self-evaluation, the experience of emotion during self-regulation, and the influence of emotion on self-regulation, including the experience of self-regulatory depletion.

SEE ALSO: ► Agency ► Self-efficacy

## Self-Report Inventory

Neal M. Kingston

*University of Kansas*

A *self-report inventory* is a type of assessment intended to measure a person's interests, attitudes, or personality. As the name implies, a self-report inventory is one where individuals are asked to respond to questions about themselves, rather than a measure which obtains information from direct observation (in either a natural or artificial setting) by one or more third parties.

Self-report inventories use a variety of item formats. Many use a Likert format, where respondents, in response to a statement, select from choices like: 1) very much like me; 2) somewhat like me; 3) neither like nor unlike me; 4) somewhat unlike me; or 5) very much unlike me. Others require examinees to respond *Yes* or *No* to statements such as "I would rather go to watch a play than go to a party." Others require respondents to endorse one of two statements as being more like themselves.

The advantages of self-report inventories are that they are fast, inexpensive, and collect information from the person with the most intimate knowledge of the subject. The primary disadvantage is that they are subject to bias, both because a person is responding to fairly subjective questions from a single point of view, and because those responses may be tinged by a desire to look good or to look bad.

## Early History

The assessment of personal characteristics has been of interest since at least the beginnings of astrology, approximately 5,000 years ago in Babylonia. In China 4,000 years ago a more rigorous, assessment center type approach was implemented to select government leaders based on both ability and personality traits. The Chinese system evolved over the millennia but continued in well-documented form until about 1900 CE. In the first half of the twentieth century free-association and projective approaches of personality assessment were developed, as well as other interview approaches used by trained psychologists.

In the late 1930s Starke Hathaway and J. C. McKinley gathered numerous questions that he and his colleagues used while interviewing patients or that had

appeared in other questionnaires. They administered about 1,000 true-false questions to 221 patients who had previously been diagnosed with psychopathology and to 724 people who were friends or relatives of the patients but who had no psychopathological diagnoses. About 500 items for which self-reports differentiated the different diagnostic categories from each other and from the “normal” group were retained and used in research for several years and then published in 1943 as the Minnesota Multiphasic Personality Inventory, the first widely used self-report inventory.

In 1946, Raymond Cattell applied a statistical technique, factor analysis, to data derived from adjectives used commonly to describe personality. This led to the development of the 16 PF (16 personality factors), a self-report inventory intended to be used broadly, not just for diagnosing psychopathology. Replications of Cattell’s work led to a reduction of Cattell’s 16 primary personality factors to five. Other early widely used self-report inventories include the California Psychological Inventory and the Thurstone Temperament Schedules.

While self-report inventories have been critiqued for their aforementioned methodological flaws, their use has grown and self-report inventories have been created to be congruent with a variety of different personality models as well as for career interests and attitudes.

## **Minimizing the Impact of Social Desirability and Other Response Sets on Self-Report Inventories**

Various approaches have been taken to minimize intentional and unintentional distortions on self-report instruments. An example of an intentional distortion is lying (or exaggerating) to appear less prone to violence than one really is. An example of an unintentional distortion might be a tendency to agree with statements (acquiescence), regardless of how they are worded. One approach requires that respondents choose between alternatives that have been matched on social desirability. So, for example, an examinee would be forced to choose between endorsing one of the following statements: 1) I am more prepared at work than most of my colleagues; or 2) I have more friends than most people. Examinees who choose the first statement might have points added to a conscientiousness score scale while examinees endorsing the second statement would have points added to their extroversion scale score. But despite the social desirability of both scales, they can only add points to one of the scales. Such an approach is called *ipsative*.

An ipsative approach does not allow people to score very high on all scales. Two people might be viewed from external evidence (or any nonipsative approach) as equally extroverted, but if one was also highly conscientious this would tend to lower that person’s extroversion scale score on an ipsative measure, as sometimes he or she would choose a response that loaded on conscientiousness when it was paired with a response for extroversion. In other words, ipsative

measures are a zero sum game – you can't be high or low on everything. Because of this, ipsative scores allow comparison of the strength of different characteristics within an individual, but not the strength of any one characteristic across individuals.

An alternative approach to minimizing social distortions on self-report inventories is to ask questions for which it is not clear the scale and direction to which a response contributes. The scale loadings for such questions are determined by statistical analysis, and not by any theoretical linkage. An example of such a question might be, "Who was the better president, John Adams or Thomas Jefferson?" It might well be that people who choose one rather than the other are more likely to be neurotic, but it is unlikely that the examinee would determine that this question contributed to the neuroticism scale or was more indicative of neuroticism.

A third approach to minimizing the impact of any respondent tendency to skew results is to determine the extent that the test taker answers in socially desirable ways by asking questions where the socially desirable response is uncommon. A set of such questions appropriate for the particular population taking the test, such as, "I never lie," or "I have never gossiped" are asked. While any respondent might honestly answer one or two such question in the affirmative, too many affirmative responses to a set of such questions suggests that consideration be given to the impact of social desirability on this person's scores.

Another response set that should be addressed is acquiescence. Some examinees tend to respond in the affirmative when they are truly ambivalent or even close to ambivalent. Others tend to respond in the negative. Either tendency can skew results. Thus it is desirable to balance questions phrased in the positive and the negative. For example, if asked if this statement describes an individual accurately, a *yes* response to "I like to be the center of attention at parties" will load positively on an extroversion scale, as will a *no* answer to the statement, "I seldom talk in large groups."

## Self-Report Inventories and Positive Psychology

Most measures used in a positive psychology context (e.g., constructs such as hope, optimism, life satisfaction, or curiosity) have been self-report in nature. In fact this is true for most personality measures and precedes the development of Positive Psychology as a field by about 70 years.

More recently, one emphasis of positive psychology has been the development of a classification of human strengths in some ways parallel to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) published by the American Psychiatric Association. This schema, the positive psychology Values in Action Classification of Strengths and Virtues, proposes 24 strengths grouped into six virtues (wisdom and knowledge, courage, humanity and love, justice, temperance, and transcendence). While there has not yet been developed a comprehensive instrument

to assess of all these strengths and virtues, and thus there is not yet empirical support for the details of this model, much progress has been made in assessing components of this model.

Research in positive psychology often requires measures of happiness. Scientifically developed general measures of happiness have been used in research since at least Fordyce's work in 1977. As positive psychology's model of happiness evolved into three parts – pleasure, engagement, and meaning, the need for new measures has become clear. Several such assessments have been developed by researchers, but at this time none are widely used outside research studies.

SEE ALSO: ► Character strengths (VIA)

## Seligman, Martin

Peter Schulman

*University of Pennsylvania*

Martin Seligman has made significant contributions to research on learned helplessness; depression; interventions that prevent depression; the relationship between optimism/pessimism and depression, achievement and physical health; positive psychology; and interventions that build strengths and well-being. Born in 1942 in Albany, New York, Seligman and his older sister, Elissa Beth, were raised by loving parents, Irene and Adrian. Seligman graduated from Princeton University in 1964 with a BA in Philosophy and attended the psychology program at the University of Pennsylvania for his PhD, graduating in 1967. His faculty advisor at Penn was Richard Solomon, a leading researcher in learning and motivation.

While a graduate student at the University of Pennsylvania, Seligman's animal research led him, along with Steve Maier and Bruce Overmier, to a discovery they called *learned helplessness*. This is considered an important discovery, as it identified a new kind of learning in which an organism recognizes there is no relationship between its behavior and desired outcomes, which can lead an organism to give up trying to achieve desired outcomes. Seligman noticed that this animal model of helplessness bore similarities to human depression, which led him to study helplessness and depression in humans.

In his research, Seligman also discovered that when exposed to uncontrollability, not all animals or humans give up in their efforts to control outcomes, and that experiences with controllability can buffer against the learning of helplessness. He next investigated the distinguishing features of those who give up from those who do not, which led him to develop the attributional style theory of depression. This theory asserts that individuals with pessimistic explanations of good and bad events are at greater risk for depression, and research has shown that optimistic

explanations buffer against depression and enhance motivation, physical health, and achievement in different domains. Seligman's research further showed that optimism can be measured and it can be learned. He subsequently developed cognitive-behavioral interventions with his colleagues to teach optimism and prevent depression among children and young adults. These interventions have proven effective in preventing depression.

In the 1990s, Seligman became increasingly interested in the flip side of human deficits and psychopathology – human strengths and happiness. Elected President of the American Psychological Association in 1996, he made one of his presidential initiatives the promotion of positive psychology. Seligman made the case that psychology had largely focused its efforts on the understanding and treatment of psychological problems, with many successes. One consequence of this focus on psychological problems, however, was that psychology has had little to say about what makes life most worth living.

Seligman therefore proposed to correct this imbalance by focusing on strengths as well as weaknesses, on building the best things in life as well as repairing the worst, asserting that human goodness and excellence are just as authentic as distress and disorder, and that the mission of psychology entails more than the undoing of problems. He believes psychology's concern with remedying human problems is understandable and should not be abandoned. Human suffering demands scientifically informed solutions. Suffering and well-being, however, are both part of the human condition, and psychologists have a responsibility to be concerned with both.

Since 2000, Seligman's main mission has been the promotion of the field of positive psychology. One of his primary goals is to produce large-scale public health benefits by building strengths and happiness through positive psychology interventions. His research covers both classroom-based and web-based versions of these programs, with the hope of achieving widespread, cost-effective dissemination of programs to schools and other organizations.

Seligman is a humanist and a pragmatist with a vision for improving the human condition. He believes the ultimate value of his scientific research lies in its ability to improve the quality of human life. His commitment to broad intellectual questions of practical importance coupled with a rigorous respect for the empirical method has given him a leading role in psychology.

Seligman does not claim that positive psychology is a new field; rather, it has many distinguished ancestors. Since at least the time of Socrates, Plato, and Aristotle, the good life has been the subject of philosophical and religious inquiry and many psychologists have been working on positive psychology topics for decades. It just hadn't been brought under one scientific umbrella – positive psychology – until recently. The contribution of contemporary positive psychology has been to make the explicit argument that what makes life most worth living deserves its own empirically based field of study, to provide a legitimate discipline that brings together isolated lines of theory and research, to promote the cross-fertilization of ideas in related fields through conferences, summer institutes and research grants,

to develop a comprehensive conceptual view of broad notions of happiness, to bring this field to the attention of various foundations and funding agencies, to help raise money for research, and to firmly ground assertions using the scientific method.

Since 1976, Seligman has been Professor of Psychology in the Department of Psychology at the University of Pennsylvania. He has written more than 20 books and 200 scholarly publications. His publications include several popular books, such as *Learned Optimism*, *Authentic Happiness*, and *The Optimistic Child* (with Karen Reivich, Lisa Jaycox, and Jane Gillham), and several scholarly books, including *Helplessness*, and *Character Strengths and Virtues* (with Christopher Peterson). His popular books have appealed broadly to the public, yet are built on firm scientific foundations. He is the recipient of four Distinguished Scientific Contribution awards from the American Psychological Association, the Laurel Award of the American Association for Applied Psychology and Prevention, and the Lifetime Achievement Award of the Society for Research in Psychopathology, among many other awards and honors. For more information on Seligman's activities and initiatives, see the following website: [www.positivepsychology.org](http://www.positivepsychology.org)

Seligman is married to Mandy McCarthy Seligman and they have seven children – Amanda, David, Lara, Nicole, Darryl, Carly, and Jenny. His wife and children are a great joy to him.

SEE ALSO: ► Positive Psychology Network

## Serotonin

Robyn McKay

*University of Kansas*

The chemical serotonin, or 5-hydroxytryptamine (5-HT), acts as a neurotransmitter in the brain. However, only a small amount of the body's serotonin concentration is actually localized in the brain. Most serotonin concentrations are produced in the gastrointestinal tract and assist in the regulation of gastric secretions and peristalsis. Serotonin has also been found to be located in blood platelets where it acts as a vasoconstrictor. An imbalance of serotonin often is considered the primary culprit in psychiatric disorders such as depression and mania. In fact, serotonin and other neurotransmitters that act on the limbic system are part of a much larger neurochemical network that has a role in the maintenance of well-being.

## The Serotonin Cycle

In part, brain functions are carried out by a network of nerves. Neurotransmitters, which are packets of biochemicals, are involved in the transmission of electrical

impulses from one nerve to another. Electrical impulses generated by nerves are used to carry out communications within the neural network. Although there are many different neurotransmitters that are involved in a variety of brain functions, serotonin is one of three neurotransmitters, along with norepinephrine and dopamine, which are used by some of the nerves that regulate the limbic system. The limbic system is the part of the brain that controls emotions such as joy, fear, sadness, and anger. Although there is still much that researchers do not understand about how the limbic system functions, serotonin is often implicated in the identification and treatment of mood disorders. Though all neurotransmitters are thought to function similarly, the serotonin release and reuptake cycle has been studied in detail because of its theorized role in mood disorders, as well as anxiety, obsessive-compulsive disorder, and eating disorders such as anorexia nervosa. Key features of the serotonin cycle are briefly discussed here.

When a nerve is stimulated, an electrical impulse travels down the axon, which is the long, thin part of the presynaptic nerve. The presynaptic nerve is simply the nerve that precedes the synapse (the space that exists between two nerves). Even though the distance between two nerves is small, the electrical impulses that nerves generate are too weak to leap across the synapse. For the electrical impulse to continue across the synapse, serotonin molecules are released from the presynaptic nerve into the synaptic fluid. The molecules are transmitted across the synapse where they attach to serotonergic receptors on the surface of the postsynaptic nerve membrane. (A postsynaptic nerve is one that follows the synapse.) Once attached to the receptors, additional biochemical reactions are triggered, which cause the postsynaptic nerve to fire. As a result, the electrical impulse continues its journey along the neural network. After the postsynaptic nerve fires, serotonin molecules are released from the postsynaptic receptors back into the synaptic fluid. Rather than remaining in the synapse, serotonin molecules are pumped back across the presynaptic membrane, a process that is referred to as *reuptake*. Once the presynaptic reuptake process is complete, serotonin molecules are recycled; or if serotonin concentrations are in excess, the molecules are metabolized by monoamine oxidase, another biochemical that resides in the presynaptic nerve. The metabolized form of serotonin (5-hydroxyindoleacetic acid or 5-HIAA) is absorbed into the blood stream, processed in the kidneys, and excreted in the urine, which completes the serotonin cycle.

Presynaptic nerves also function to produce enough serotonin so that neural transmissions remain in balance. When serotonin and the other neurotransmitters involved with mood regulation are functioning properly, i.e., produced in proper concentrations, the limbic system seems to work well. In other words, positive mood states such as joy, self-confidence, energy, and enthusiasm are associated with appropriate concentrations of serotonin and other neurotransmitters that act on the limbic system.



## **Pharmacologic Solutions for Improved Well-Being**

Since there is much left to be understood about how the brain functions, psychiatric researchers have offered theories to explain the etiology of depression and well-being. Early research suggested that serotonin concentrations are depleted in the case of depression, and are in excess in the case of mania. More recently, the postsynaptic serotonergic receptors, instead of serotonin itself, have been implicated in mood dysregulation. Furthermore, other neurotransmitters, including dopamine and norepinephrine have also been implicated in the regulation of mood and emotions. In any case, three main classes of antidepressants are typically prescribed to treat depression: selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants, and monoamine oxidase inhibitors (MAOIs). Each class of antidepressants is theorized to act slightly differently. For example, SSRIs are thought to block the reuptake of serotonin to the presynaptic nerve. If this mechanism is the case, then serotonin concentrations are theorized to increase, which in turn leads to reductions in symptoms of depression. In contrast, MAOIs are thought to inhibit the action of monoamine oxidase, which is involved in the metabolism of serotonin after it has been reabsorbed into the presynaptic nerve. Importantly, the mechanism of action of antidepressants, or the way that antidepressants act on the body system, is continuing to be understood.

Antidepressants typically take approximately 6 weeks to become fully effective. Researchers theorize that the number of postsynaptic receptors may change in response to antidepressant medications, a biological process that may take time. Neurogenesis (the generation of new neurons), a theory that has gained attention in recent years, is another possible explanation for the delay in the efficacy of antidepressants. Specifically, the neurogenesis theory proposes that increased serotonin concentrations in the brain are associated with the growth of new neurons, which in turn, has been linked to reduced symptoms of depression and increased feelings of well-being.

## **Mind-Body Solutions for Improved Well-Being**

Along with norepinephrine and dopamine, serotonin is regarded as a key neurotransmitter that is affected by the body's response to stress. Increased serotonin concentrations also are associated with subjective feelings of well-being. However, during prolonged periods of stress, the brain's biochemistry may become unbalanced when an excess of the neurochemical cortisol is produced. The continuous production of cortisol may reduce the availability of tryptophan, the precursor to serotonin. In turn, reductions in serotonin concentrations result in changes in sleep and appetite, depression, and other mood disorders. Other stress-related disorders that can result include anxiety, gastrointestinal disorders, substance abuse, eating disorders, cardiovascular disease, obesity, and diabetes.

Antidepressants are one means of managing the effects of chronic stress. Psychiatric researchers often consider the mind-body connection when examining the biological basis mood regulation. The body's response to stress (the fight or flight response) has been implicated in the regulation mood and emotions. The stress response is governed by the central nervous system. However, genetics, social and cultural influences, critical life events such as traumas, and behaviors such as sleep, nutrition, substance use, as well as individual differences in emotional regulation each play a role in the stress response.

Behavioral medicine interventions targeted at stress management are gaining empirical support as well. One of the goals of the behavioral medicine approach is to repair the stress response in an effort to treat chronic disorders. Theoretically, serotonin production may be changed in some way in response to behavioral interventions. Emerging evidence suggests that mind-body interventions are associated with increases in serotonin concentrations, which in turn may relieve the stress response, and improve subjective feelings of well-being.

Relaxation response training, social support, modifications to nutrition, increased exercise, cognitive-behavioral therapy, and meditation are behavioral interventions that have been demonstrated to improve coping and health outcomes. In particular, relaxation training has been shown to have psychological and physical benefits, such as reductions in chronic pain, depression, and anxiety. Regular meditation practices provide benefits that are associated with elements of positive psychology. In addition to reductions in anxiety and depression, people who meditate regularly report improvements in awareness, calmness, and control. They also seem to have more positive outlooks than those who do not regularly practice meditation. Finally, journaling about traumatic events (which are associated with chronic stress) is associated with symptom reduction and fewer doctors' visits.

## Conclusion

The neurotransmitter serotonin is part of the larger mind-body system that functions to maintain well-being. Balanced serotonin concentrations are associated with positive mood and emotions, including happiness, joy, self-assurance, and optimism. When serotonin concentrations are altered in response to chronic stress, negative emotions, as well as anxiety and depression can result. Antidepressant medications have been demonstrated to recalibrate the biochemistry of the limbic system, which is in turn associated with improvements in mood and emotions. In addition, relaxation response training, meditation, cognitive-behavioral therapy, and journaling are among the behavioral medicine interventions that are associated with improved mood and well-being. The combination of pharmacotherapy and behavioral interventions may be appropriate for the treatment of symptoms related to chronic stress, depression, and other mood disorders.

SEE ALSO: ► Neurobiology ► Positive emotions

## Smiles

Anthony Papa

*Department of Veterans Affairs, Boston Healthcare System*

Smiles are facial expressions characterized by upward curving of the corners of the mouth and lips. In addition to upturned lip corners, some smiles include crinkling or crow's feet at the outer eye corners.

### Brief History of Smile Research

The history of smile research is linked to research into facial expressions of emotion in general. Charles Darwin (d. 1882) was one of the first to scientifically explore facial expressions of emotion in his 1872 book, *The Expression of Emotions in Man and Animals*. In this book, Darwin attempts to prove that humans were subject to evolution and natural selection by demonstrating commonalities of expressions across mammalian species (e.g., bared teeth mean anger for both you and your dog). For Darwin, facial expressions of emotion were vestigial traces of our evolutionary past that linked us to other "lower" mammals that also seem to aid communication within and between species.

While research and theorizing on emotions continued in the subsequent years, research into facial expressions, smiles, and smiling was mainly anthropological in nature. In the 1960s, Sylvan Tompkins defined and described the basic human emotions and associated behaviors (such as smiling). His students provided the necessary tools to continue the scientific inquiry into basic emotions by creating objective, observational coding systems to measure facial expressions. One of those students, Paul Ekman, whose work into the types, functions, and behaviors associated with basic human emotions has been very influential, has given particular attention to the types and function of smiles. Research by Ekman and others influenced by him continue to focus on the types and functions of smiles and the behaviors and situations associated with smiling.

Because coding facial expressions is very labor intensive, new technologies are being used and developed to measure smiles and facial expressions in general. Currently, research on smiles often uses electromyography (EMG) to measure related muscle movements, and recently there is work to utilize infrared cameras, and computer algorithms that automatically recognize emotion related facial expressions.

### Types of Smiles

Voice, posture, and gesture all communicate emotion, but facial expressions are hypothesized to be the primary means of communication. Facial expressions of

emotion have been shown to communicate individuals' internal states, social intent, and information about the environment. Only in the last few decades has research begun to explore what smiles communicate. A crucial insight into the functional nature of smiling emerged with the demonstration of two physically discrete types of smiles, associated with unique neuroanatomical correlates.

### Genuine Smiles

Genuine or *Duchenne* smiles involve not only an upward turn of lip corners caused by contraction of the zygomaticus major muscles associated with a prototypical smile, but also the tightening of the orbicularis oculi muscle around the eye, typically causing crow's feet. They are named Duchenne smiles after the French neurologist, Guillaume Benjamin Amand Duchenne de Boulogne, who first noted in 1862 in *Mecanisme de la Physionomie Humaine* that orbicularis oculi muscle contraction occurs during spontaneous, not posed, smiles of enjoyment. This observation remained unexplored and unreplicated until Paul Ekman and colleagues provided further evidence that Duchenne smiles consistently cooccur with positive emotion such as happiness and amusement.

### Nongenuine Smiles

People often smile in nonpositive affective states. These polite, *non-Duchenne* smiles typically consist of the upward turn of lip corners caused by contraction of the zygomaticus major muscles, without crow's feet caused by the contraction of orbicularis oculi around the eye. Non-Duchenne smiles are not typically associated with positive emotion.

### Smiles in Infants

While Duchenne and non-Duchenne smiles appear to have different functional roles in adults, infants' smiles appear to be less differentiated. Infants' smiles appear to be consistently associated with positive stimuli, and the difference between non-Duchenne and Duchenne smiles may be a matter of degree. Recent work suggests, though, that infants' non-Duchenne, Duchenne, and Duchenne smiles with an open mouth (called *duplay* smiles – a distinction not explored in adult research) are associated with specific situational contexts, implying different functions. It remains unclear at what age humans begin to display nongenuine smiles.

### Trends and Limitations in Current Research

A large percentage of studies on smiles and smiling, both past and present, have not made the distinction between Duchenne and non-Duchenne smiles, and consequently have often produced inconclusive or contradictory results. While

differentiating smiles based on the action of the orbicularis oculi muscle has been fruitful scientifically, it is unclear at this time if these two types of smiles represent the entire repertoire of distinguishable smiles communicated by adults. Due to the methodological constraints of facial coding, little work has been done examining human interactions in naturalistic settings to identify other possible smile exemplars.

## **Functions of Smiles**

### **Smiles are Social Signals**

Fridlund found that people smiled more often in social contexts than alone, despite being exposed to the same stimuli and reporting the same amount of positive emotion. He hypothesized that smiles were not related to emotional experience but are social signaling behaviors. Subsequent research has replicated but qualified Fridlund's basic findings. Smiling alone, while less frequent than in social situations, is associated with the intensity of the stimuli and reflects positive emotional arousal.

Duchenne expressions have been shown to elicit positive emotional reactions in others, positive personal attributions, affiliative responses and even increased forgiveness. In terms of well-being and adjustment, Duchenne expressions have also been associated with greater marital satisfaction in middle-aged and older couples, and less likelihood for divorce. Strong Duchenne smiles in college yearbook pictures have been associated with less daily distress and greater overall emotional and physical well-being up to 30 years later. Beyond merely signaling current emotional states that reflect current adjustment, Duchenne smiles may promote positive adjustment by eliciting positive responses in other people, encouraging social affiliation, and increasing availability of social resources for coping with adversity.

The scientific literature is mixed about the social effects of non-Duchenne expressions. Some studies have shown that non-Duchenne smiles evoke less positive responses in others than Duchenne smiles, whereas others do not. Non-Duchenne smiles have been shown to function as polite social markers, to mask feelings, and to communicate appeasement.

## **How Smiles Shape the Social Behavior of Others**

Evolutionary based, social functional theories of emotion hypothesize that expressions of emotion in mammals are evolutionary adaptations to social environments, related to the creation and maintenance of social relationships and the organization of interindividual (and interspecies) interactions. Emotional facial expressions shape the responses of others in social environments by evoking

specific emotional responses and reinforcing or discouraging social behaviors. Positive and negative emotional reactions appear to be elicited automatically in people exposed to positive and negative facial displays, even when exposure is at speeds below the level of conscious perception.

Keltner and Bonanno found that bereaved individuals who displayed Duchenne expressions and laughter while talking about their bereavement evoked more positive emotion and less frustration in observers, reported better relationships with others, and were found to have better long-term grief outcomes. They hypothesized that Duchenne expressions, by evoking positive emotions in others, increased positive social interactions and social integration, thus promoting well-being. Social integration and regular positive interactions with others are thought to promote better mental and physical health by fostering the development of meaningful social roles, self-worth and self-efficacy, and a stable sense of self.

### Differences in Displays of Smiles Based on Social Status, Gender, and Power

Research indicates that females smile more than males, and subtle reminders of culture-based, gender roles heighten this effect, suggesting that rather than a biological sex difference, the frequency of smiles is socially and culturally constrained. Indeed, social role, status, and power (i.e., employer vs. employee) have also found to be related to frequency and types of smiles in social interactions.

### Smiles Are an Important Part of Emotional Self-regulation

A major component in regulating emotion is the ability to modulate emotional responding with dispositional differences in individuals' emotional expressive behaviors having a broad effect on adjustment across life span.

#### *Facial feedback*

With emotion regulation partially related to modulating emotional responses and expressions, an important component of this process is facial feedback. Mimicking the key muscle movements of emotional facial expressions are associated with autonomic nervous system arousal and increases in the subjective experience of the associated emotions, even when the facial display is unfelt and even when participants are not aware that they are contracting muscles that are part of a specific emotional facial display. Mimicking Duchenne, but not non-Duchenne smiles, is associated with increases in positive emotion, and may have a strong impact on individuals' ability to regulate emotion.

#### *Undoing the effects of negative emotion*

Fredrickson hypothesizes that one primary function of positive emotions is to reduce or undo the effects of negative emotion on individuals, by acting

as a self-regulatory “emotional reset.” A number of studies have found that experience of positive emotion after a negative emotional induction or event is associated with faster cardiovascular recovery to baseline compared to exposure to a neutral or sad film. In the only study looking at expressive behaviors, Keltner and Bonanno found that bereaved participants who exhibited Duchenne laughter (Duchenne smiles with audible laughter-related vocalizations) while being interviewed about an unexpected death had reduced negative affect at the end of an interview.

#### *Broaden and build*

Given that positive affect has been linked to increases in problem-solving and decision making ability, cognitive flexibility, variety-seeking, and motivation, Fredrickson has also proposed that positive emotion serves to broaden and builds one’s ability to cope with life events by offsetting cognitive narrowing associated with the experience of stress. Self-reported emotional responding has been associated with changes in cognitive appraisal and increased coping, but the relationships of smiles to this phenomenon remains to be explored.

#### Trends and Limitations in Current Research

Much work remains in elaborating on the situational constraints of how smiles function and how they relate to adaptation and maladaptation in individuals’ social interactions and ability to self-regulate. Again, research into the effects and functions of smiles have been mostly lab-based or inferential, due to the time costs of fine-grained facial coding, and as a result, naturalistic responding in normal social interactions or during environmental challenges remains largely unexplored.

SEE ALSO: ► Broaden and build theory of positive emotions ► Laughter  
► Positive emotions

## **Snyder, C. R.**

Shane J. Lopez and Candice A. Ackerman

*University of Kansas*

Charles Richard “Rick” Snyder (1944–2006) was the Wright Distinguished Professor of Clinical Psychology at the University of Kansas, and is probably best known for his work on hope. Snyder is internationally known for research in clinical, social, personality, health, and positive psychology. His career in psychology began in his studies at Southern Methodist University, his subsequent doctoral training in clinical psychology at Vanderbilt University, and his

post-doctoral training at the Langley Porter Institute. He spent the remainder of his career as a psychology professor at the University of Kansas, during which he produced many important contributions to the field of positive psychology. Some of his most relevant publications include *Positive Psychology* (the first textbook in this area), *The Handbook of Positive Psychology*, *Positive Psychological Assessment*, *Uniqueness: The Human Pursuit of Difference*, and *The Psychology of Hope*. In addition to his theories on hope and forgiveness, Snyder also developed theories on how people react to personal feedback, the human need for uniqueness, and the ubiquitous drive to excuse and forgive transgressions.

Snyder, through his publications and his 12-year editorship with the *Journal of Social and Clinical Psychology*, demonstrated how studying psychology at the social-clinical interface promotes understanding of human functioning. Additionally, his analysis of the motivational forces that disconnect individuals from the negatives of the past – excuse-making and forgiveness – and connect them to the possibilities of the future – hope – help people around the world to live more positive lives. Furthermore, Snyder demystified hope for researchers, clinicians, and laypersons, and the robust hope literature remains a touchstone for future research on human strengths. As one of the leading positive psychologists, Snyder charted a sustainable future course for studying and applying positive psychology principles.

Though Snyder's contributions were numerous and influential, he probably is most closely associated with his work on hope. His theory of hope emphasizes goal-directed thinking in which the person utilizes both pathways thinking (the perceived capacity to find routes to desired goals) and agency thinking (the requisite motivations to use those routes). In 2000, he had the opportunity to demonstrate his hope theory in action on *Good Morning America* by conducting a live experiment with the show's correspondents. The experiment was a success, and Snyder was able to demonstrate his theory of hope to millions of viewers.

In his career, Snyder won 27 teaching and mentoring awards, including twice being selected for the University of Kansas' prestigious Honor for an Outstanding Progressive Educator (known as the HOPE award) by the undergraduate seniors. In 1995, APA's Division of Teaching awarded him Fellow status. Snyder also mentored 41 doctoral students as their dissertation chair, and a group of them nominated him for the American Psychological Association's Raymond Fowler Outstanding Graduate Mentor Award, which he received in 2000. In 2005, Snyder accepted an honorary doctorate from Indiana Wesleyan University. His research on uniqueness received rare recognition as the subject of a Sunday Doonesbury cartoon sequence, a signed copy of which hangs in his study at home. And yet, in Snyder's own words, "these accomplishments are packaged in a graying and self-effacing absent-minded professor who says of himself, 'If you don't laugh at yourself, you have missed the biggest joke of all!'"

SEE ALSO: ► Hope



## Social Cognitive Theory

Robert W. Lent<sup>a</sup> and Gail Hackett<sup>b</sup>

<sup>a</sup>University of Maryland; <sup>b</sup>Arizona State University

*Social cognitive theory* is an influential approach to understanding human thought processes, motivation, affect, and behavior. The theory focuses on the interaction among the person, his or her behavior, and the environment. A key feature of the theory is its emphasis on the ways in which people assert agency, or self-direction. Developed by Albert Bandura, it has been used to study many aspects of psychosocial functioning, both positive and problematic in nature. Originally termed *social learning theory*, Bandura's framework emerged in the 1960s, emphasizing the social context of human learning. It has been subjected to a great deal of subsequent research and conceptual development, culminating in his 1986 landmark work, *Social Foundations of Thought and Action: A Social Cognitive Theory*. In its current form, the theory encompasses a wide array of determinants of human behavior and behavior change, bringing them together within a coherent integrative system that highlights people's capacity for self-regulation. The theory has been applied to many topics of relevance to positive psychology, such as health-promoting behavior, academic motivation and performance, career development and work adjustment, and adaptive coping with diverse physical and psychological problems.

### Basic Concepts and Elements

Social cognitive theory incorporates and extends Bandura's previous work on social learning and self-efficacy theories. The shift from social learning to social cognitive theory did not represent a radical departure from his earlier position but rather an evolving, maturing view that emphasizes the important role of cognitive processes in guiding human behavior. This view acknowledges that behavior is responsive to environmental conditions, yet that people also possess agentic (i.e., self-directing) capabilities. In particular, Bandura offered a *triadic reciprocal* model of person-situation transaction in which three major classes of factors affect one another bidirectionally: a) person variables, such as internal cognitive and affective states, and physical attributes; b) external environmental conditions; and c) people's overt behavior. The ongoing interaction among this set of causal factors is viewed as essential in understanding the dynamic nature of human behavior and the means by which people both affect and are affected by their environments.

In its analysis of the personal determinants within the triadic-reciprocal causal system, social cognitive theory highlights a variety of cognitive capabilities that enable humans to guide their own behavior. In particular, *symbolizing capability* refers to the ability to form cognitive representations of the world, allowing one to build internal models that guide future action. *Forethought* is the ability to

anticipate the future, including imagining the possible consequences of one's actions, which can provide motivation for pursuing courses of action that do not have immediate payoffs. *Vicarious capability* allows people to learn via observation. People learn not only in an imitative sense, reproducing observed behavior, but they also learn rules and expectations, and can absorb lessons from the consequences experienced by models. This can significantly reduce the time and risks associated with learning particular skills (e.g., driving). *Self-regulatory capability* refers to people's ability to govern their own behavior by developing internal standards, exercising self-evaluation, influencing the environment, and creating their own performance incentives. *Self-reflective capability* involves humans' meta-cognitive capacity to review their own experiences and analyze and alter their own thinking.

Much research on social cognitive theory has examined person variables that derive from the above basic cognitive capabilities, in particular, self-efficacy beliefs, outcome expectations, and personal goals. *Self-efficacy beliefs* refer to "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). These beliefs are seen as constituting the most central and pervasive mechanism of personal agency, helping to determine such outcomes as behavioral choices, effort expenditure, persistence in the face of obstacles, thought patterns, and emotional reactions. Self-efficacy is not viewed as a global trait but rather as a dynamic set of beliefs about one's capabilities to perform particular tasks or courses of action. Such beliefs do not substitute for objective ability; they complement ability by affecting the manner in which people organize and deploy their skills.

Self-efficacy beliefs are assumed to be acquired and modified through four primary sources of information: personal performance accomplishments; vicarious learning or modeling (observing similar others); social persuasion (e.g., verbal encouragement or support from others); and physiological and affective states (e.g., experiencing anxiety when performing a particular behavior). The impact that these informational sources have on self-efficacy depends on a variety of factors, such as how the individual attends to, interprets, and recalls them. However, in general, personal accomplishments (e.g., successes or failure) have the potential to exert the greatest influence on self-efficacy.

*Outcome expectations* refer to beliefs about the consequences or outcomes of performing particular behaviors. Whereas self-efficacy beliefs are concerned with one's capabilities (e.g., "can I do this?"), outcome expectations involve imagined consequences of particular courses of action (e.g., "if I try doing this, what will happen?"). Bandura maintains that self-efficacy and outcome expectations both help to determine a number of important aspects of human behavior, such as the activities that people choose to pursue and the ones they avoid. People are more likely to choose to engage in an activity not only to the extent that they view themselves as competent at performing it but also to the extent to that they expect their efforts to lead to valued, positive outcomes (e.g., social and self-approval, tangible rewards). However, self-efficacy may be the more influential determinant

in many situations, for instance, where complex skills or potentially costly or difficult courses of action are involved. In such situations, people may hold positive outcome expectations but still avoid a course of action if they doubt they have the capabilities required to succeed at it (i.e., where self-efficacy is low).

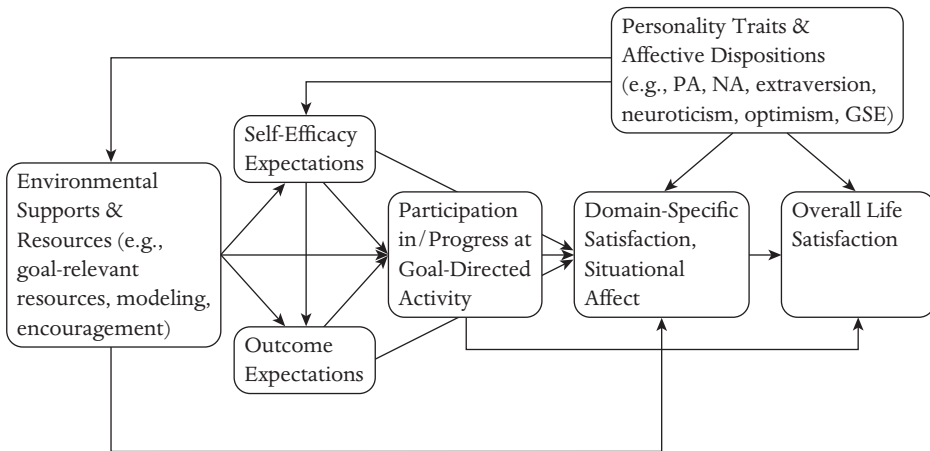
Personal *goals* may be defined as one's intention to engage in a particular activity or to produce a particular outcome. Goals afford an important means by which people exercise agency. By setting personal goals, people help to organize, direct, and sustain their own behavior, even over long intervals without external pay-offs and despite inevitable setbacks. Social cognitive theory maintains that people's goals are importantly affected by their self-efficacy and outcome expectations. In particular, people tend to select goals that are consistent with their self-efficacy and the outcomes they expect to attain from pursuing a particular course of action. Success or failure in pursuing one's goals, in turn, has a reciprocal influence on self-efficacy and outcome expectations. Successful goal pursuit, for example, may further strengthen self-efficacy and outcome expectations within a positive cycle.

### **Illustrative Application: Subjective Well-Being**

Social cognitive theory has been used as a basis for research and practice on a wide array of topics that are relevant to positive psychology. One recent example involves the study of subjective well-being (SWB) – a key aspect of positive emotional functioning. SWB is often defined as a three-component construct that includes life satisfaction, positive affect, and negative affect. Reviewers have concluded that SWB is likely to be determined by a variety of factors, such as personality, cognitions (e.g., goals), and environmental resources. They have also recommended that the three aspects of SWB be disaggregated so that research can better establish how they function together and what variables uniquely affect each of them.

Observing that social cognitive variables, such as self-efficacy and goals, have been individually linked to SWB, Lent proposed a unifying perspective in which cognitive, behavioral, social, and personality/affect variables are seen as joint determinants of domain-specific and global life satisfaction. This framework employs social cognitive theory as the foundation for its integrative view of SWB, yet also incorporates personality elements in order to accommodate findings showing that affective traits are reliably linked to SWB. The resulting model attempts to reconcile “top down” (dispositional) and “bottom up” (situational) approaches to the study of SWB. At a practical level, and in keeping with the spirit of social cognitive theory, the model emphasizes determinants of SWB over which people can exercise agency and that are readily susceptible to therapeutic efforts (e.g., the setting and pursuit of personal goals, involvement in valued life tasks, building social supports), while also acknowledging factors (e.g., personality dispositions) that may be more resistant to traditional approaches to therapy.

Lent's framework consists of two interconnected models, one aimed at the experience of well-being under normative life conditions and the other focusing



**Figure 8** Contributions of Personality, Affective, and Social-Cognitive Variables to Well-Being under Normative Life Conditions.

Notes: NA = negative affectivity; PA = positive affectivity; GSE = generalized self-efficacy.

Source: From Lent, R. (2004). Toward a unifying theoretical and practical perspective on well-being and psychosocial adjustment. *Journal of Counseling Psychology*, 51, 500. Copyright 2004 by the American Psychological Association. Reprinted with permission.

on the recovery of well-being subsequent to stressful or traumatic life events. The normative well-being model is displayed in Figure 8. According to this model, overall life satisfaction is influenced by certain personality variables (e.g., trait positive and negative affect), satisfaction in one's central life domains (e.g., work, family), participation in valued life tasks, and progress at fulfilling salient personal goals.

Domain satisfaction, one of the precursors of overall life satisfaction, is seen as partly determined by personality factors, but is also posited to be affected by agentic, social cognitive mechanisms, in particular, goal-directed activity, self-efficacy, outcome expectations, and environmental supports and resources. In other words, in addition to benefiting from particular traits, people are more likely to be satisfied within a given life domain when they actively pursue and make progress at their personally valued goals; feel competent at the tasks required for successful performance and goal pursuit; anticipate the receipt of favorable outcomes; and perceive their environment as supportive and as offering resources to enable their goal pursuit in that life domain. Both for theoretical reasons and because of their assumed relevance to preventive and therapeutic interventions, the model is also concerned with the nature of the relations among the social-cognitive precursors of domain satisfaction.

Given the newness of this extension of social cognitive theory, it has thus far received limited empirical study. However, a few studies have found good support for the model of normative well-being in samples of college students. The model has also been adapted as a theoretical approach to the study of work satisfaction

and as a source of clinical ideas for assisting the emotional recovery of cancer survivors. Further research, particularly involving longitudinal and experimental designs, is needed to more fully test the causal hypotheses of this model and to explore its clinical utility.

SEE ALSO: ► Agency ► Bandura, Albert ► Future mindedness  
► Goals and goal theory ► Self-efficacy

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## Social Skills

Ya-Ting Tina Yang  
*University of Kansas*

Social skills are the complex set of skills that include the development of effective social behaviors, an awareness of the social norms that affect social behavior in different situations, and the abilities to select effective responses, to perceive accurate feedback from others, and to modify one's social behavior based on the feedback received. In other words, social skills involve communication, assertion, peer and group interaction, problem-solving and decision making, and self-management. Social skill or interpersonal skill is not a single entity, but a collection of many basic socially desirable skills. Researchers have been able to develop standardized instruments to measure constructs and dimensions related to interpersonal and social skills, which include: empathy, shyness, assertiveness, sociability, self-monitoring, and verbal and nonverbal communication skills. Although a vast amount of research has been conducted, one of the limitations is that many of the studies assess a single dimension of social skill even though the construct may be multidimensional.

Based on the interactions among the individuals, the response elicited from others, and the social context, social skills allow individuals to perform competently within social situations. With good social skills, individuals are able to establish more confidence, resilience, and peer acceptance, whereas people with poor social skills may experience peer rejection, low self-esteem, and mental health problems such as depression, conduct disorders, and social phobia.

Social skills training (SST) was developed and popularized to teach more effective social behaviors. Although a variation of approaches and names might have been given to SST programs, training components usually consist of acquiring desirable social response, practicing response obtained, shaping response by

corrective feedback and reinforcement, and applying learned response in natural environment settings via cognitive restructuring.

In recent years, SST also served as an intervention for specific problems, populations, and settings. For example, it has been used with children and college students with or without disabilities, mental patients in psychiatric units, adults in the workplace, etc. Evidence from several studies has shown positive outcomes of SST, resulting in less anxiety and greater improvement of social adjustment. However, training of social skills has its limitations; the results were often not long-lasting and changes did not transfer from clinical settings to real-life environments. Furthermore, SST did not generate as powerful results when used alone. Nonetheless, SST has been widely accepted and integrated into the broader treatment and intervention programs as an important component. Future studies must attend to basic social skills as well as SST outcome maintenance and generalization from one setting to another.

SEE ALSO: ► Social support

## Social Support

Benjamin H. Gottlieb

*University of Guelph*

Social support refers to the social-psychological and interpersonal processes that maintain and promote health and well-being. The sources of social support usually inhabit the inner circle of the individual's social network, typically composed of close friends and family members. The types of social support they can provide include practical aid, socializing and companionship, cognitive guidance, reassurance of worth, and emotional nurturance. The beneficial effects of such support arise either through interaction with these close associates or through the social-psychological representation of them as resources for resisting stress and meeting basic human needs.

Formal study of social support commenced in the final quarter of the twentieth century when converging research in the fields of epidemiology and community mental health identified the important role of the social network in health protection and in the help-seeking process, respectively. Several international studies showed that people who experienced higher levels of social integration, indexed by their private and public social ties, had significantly lower morbidity and mortality rates than those who were relatively isolated. Community mental health studies showed that members of the close social network were the first to hear and be consulted about the stressors and strains of everyday life, such as marital difficulties and depressive episodes. These studies in turn set the stage for psychologists, communication researchers, epidemiologists, and behavioral and medical investigators to examine the power and means through which social support affects health,

morale, and life quality. In the process, much has been learned about the fallibility of social support and its promise as a strategy for social intervention.

The preponderance of empirical inquiry on social support has centered on its role in the stress process that arises from people's exposure to stressful life events, chronic hardships, and role transitions. With few exceptions, the evidence reveals that *perceived support* accomplishes a stress-buffering or cushioning impact. This means that people who believe that their close associates are able and willing to provide needed support do not experience as much stress as those who do not harbor such beliefs. Paradoxically, it appears that confidence in the supportive provisions and good will of the network can empower the individual to "go it alone." However, the process whereby perceived support accomplishes its stress-moderating functions is not yet well understood, with competing theories ranging from the biochemical to the purely psychological receiving empirical study. For example, perceived support may effect salutary immune system responses, instill greater self-efficacy, or shape more benign appraisals of the stressful situation. Knowledge of how perceived support arises, how stable it is, and how it affects health behaviors and status can inform the planning of interventions aimed to foster greater resiliency among populations at risk.

Actual or enacted support transactions that transpire in naturalistic settings have received less attention than perceived support, partly because of the challenges involved in their documentation. A handful of laboratory studies and even fewer field studies have observed interactions between marital partners, mothers and their children, and students in contrived situations, the majority of studies relying on self-reported descriptions of support-relevant interactions. No study has compared the information gained from observation of the support mobilization process and subjective reports on the same process. This means that we know little about how people experience and interpret interactions that observers define as supportive in nature. Again, such information is vital for planning programs that marshal support.

The direct or main effects of social support are often contrasted with its stress-moderating effects. That is, in everyday life social ties are among the most valued and meaningful of treasures. Spirits are buoyed by interactions with family members and friends, thereby elevating levels of positive affect and self-worth. The close network provides a sense of belonging and purpose, and perhaps the motivation to keep oneself well to ensure the wellness of others. The network can also contribute directly to health by sheltering individuals from exposure to certain controllable stressors, such as unwanted pregnancy or job loss. It can also provide information about and reinforce self-care practices while also exerting pressure to relinquish self-injurious health behaviors such as smoking, poor dietary practices, and substance abuse. Whether viewed as a contributor to morale and general well-being or as an antidote to loneliness and anomie, this perspective spotlights the basic feedback functions of the network in the process of regulating emotions, cognitions, and behaviors.

The distinctions among the sources, types, and behavioral versus perceptual manifestations of social support are reflected in the abundant measures of the

construct that have appeared in the literature. Measures of perceived support are far more numerous than measures of actual support. Some measures gain information about support in a global manner, while others call for information about the sources, types, and sufficiency of support, and may even solicit the recipient's evaluation of its quality. The choice of measures should be predicated on careful consideration of study aims. Investigators may be more interested in capturing information about certain actors in the network than gaining a global measure of perceived or enacted support. Moreover, some types of support may be of greater interest than others, and in some studies the support provider's perspective may be more important than the recipient's perspective. For example, studies of the family caregivers of persons affected by Alzheimer's disease or of the spouses of persons who are trying to quit smoking may focus on the impediments to the provision of support that they experience. Finally, epidemiological investigations that explore social support from a social integration perspective tend to delve into the structural properties of the personal community or network in which people are embedded. They examine the network's size, composition, dispersion, density, and clustering in order to gain insight into the features that best predict the delivery and durability of support as a mediator of health behaviors and health outcomes.

A final set of basic studies on social support bring into sharp relief the misgivings that people can have about soliciting and accepting aid from peers, as well as the injudicious behaviors of well-intentioned donors of aid. Social-psychological studies of the helping process have revealed that people are often reluctant to seek support because of the threat it poses to their sense of competence and self-worth, and because of concerns about social indebtedness and social control. We tend to resist seeking support from associates who may blame us for bringing our calamities upon ourselves, or who may castigate us for our failures to manage our troubles independently. Studies have also demonstrated that our associates can be overzealous in their supportive behaviors, becoming emotionally overinvolved, limiting our sense of decisional control, and even robbing us of a sense of agency and mastery. We have also learned that support tends to be miscarried when the would-be supporters are faced with a highly emotional associate or with an associate who for some reason is incapable of effectively using the provider's support. Collectively, these studies of the fallibility of social support not only dispel some of the romanticism attached to the concept of informal support systems, but also invite further study of the conditions and actors that contribute to both the miscarriage and felicitous expression of support.

Social programs and community interventions involving social support have long preceded the initiation of these varied lines of investigation. Community services such as Big Brothers/Sisters and self-help mutual aid (MASH) organizations such as Alcoholics Anonymous have recognized and harnessed the power of social ties as sources of influence on matters of health and well-being. However, even though the idea that social ties can be "good medicine" is not novel, the knowledge gained from research has brought new measurement tools, better evaluation practices, and more exacting program design to these historic initiatives. It has



also provided blueprints for a new generation of intervention studies that promise to refine this stream of positive psychology practice.

Support groups are among the most widely implemented community interventions. Led by one or more professional practitioners, the support group combines expert information and the experiential knowledge of the participants. It is usually time-limited, composed of 10 to 12 participants who share a common stressor, life event, transition, affliction, or noxious habit, and involves a balance of expert guidance and experience-swapping among participants. Processes of social comparison, (re)attribution, emotional validation, and problem-solving lie at the heart of the beneficial effects that are produced by these groups. However, as research accumulates, it is also becoming evident that they are not universally attractive, benefit some participants more than others, and tend to be too short in duration to be effective, especially in chronically stressful circumstances. Evidence also suggests that support groups for people affected by cancer demonstrate improved psychosocial and life quality outcomes but do not slow down disease progress or increase survival time.

Whereas support groups introduce a new set of similar peers, interventions involving the introduction of a single new supporter have also received greater currency. In some instances, the supportive ally is a close associate such as the spouse, and in others the ally is a stranger who must first form a trusting relationship with the focal individual as a basis for rendering support. Examples include home visitors who reach out to young, low-income mothers, and therapeutic “buddies” who are helping one another lose weight, quit smoking, or achieve dietary or exercise goals. Research on the factors that contribute to effective matches, and on the optimal intensity and duration of these dyadic strategies of marshaling, specializing, or augmenting support is sorely needed.

Growing evidence of the importance of supportive social ties for the health and well-being of the population will undoubtedly spur continued research and practice. By refining our knowledge of the people who most need and can benefit from social support, of the contexts in which social support can make a positive contribution, and of the most attractive and effective ways of mobilizing support, research will help to illuminate yet another domain of a positive psychology built on human relationships.

SEE ALSO: ► Health psychology ► Social skills ► Well-being

## **Social Work**

Uta M. Walter

*Catholic University of Applied Sciences, Berlin*

Social work is the applied science and art of professional assistance for individuals, groups, or communities with the goal of improving or maintaining the functioning,

well-being, and human potential of all people. Highly diverse in its fields and forms of practice as well as in its use of various psychological and sociological theories and philosophies, the profession is bound together by shared aims and values. With roots in humanitarian and democratic ideals, social work holds central such values as the respect for the equality, worth, and dignity of all human beings, enhancing the welfare of all people, and promoting social justice and human rights. Social work values are embodied in the profession's national and international codes of ethics.

## **Shifting Identities: Historical Developments and Tensions**

Since its beginnings as a profession during the nineteenth century, social work history and identity have been characterized by a diversity of roots and influences sometimes perceived as complementary, and sometimes as contradictory. Prominent among the early roots for social work in the United States is the settlement movement with its focus on community work, most famously represented by Jane Addams' Hull House in Chicago, and the tradition of individual case work which was strongly promoted by Mary Richmond's publication of *Social Diagnosis* in 1917.

In the following decades, social work struggled to extricate itself from the devaluing perception as a female activity and instead establish social work as a legitimate profession with its own scientific base and theory. In the course of this struggle, social work continually shifted preferences and emphases and allied itself with various schools of thought borrowed from psychology and sociology, ranging from psychoanalytic and psychodynamic theories, to Habermas' critical theory, or Bateson's ecosystems theory. Another ongoing tension concerns social work's identity as a change agent seeking to liberate oppressed populations and its simultaneous tradition of ensuring societal stability as an agent of the state or other societal powers. These philosophical and theoretical tensions in the discourse about social work only somewhat abated as the profession was able to establish itself more firmly but never ceased entirely, thus continuing the tradition of social work as a profession with multiple and shifting identities.

## **Person-in-Environment**

Social workers today perform in a wide array of fields and functions that include direct practice with clients, as well as administrative, research, or advocacy functions in academic, governmental, and nongovernmental organizations. They work with individuals and families (micro-level), groups and organizations (mezzo-level), as well as with communities, or as political change activists (macro-level). Social

work typically intervenes at the nexus of system boundaries where different social systems interact with people. Trying to remove barriers, inequities or injustices, responding to crises as well as to everyday personal and social problems, the profession underscores the importance of holding the dual focus of a person-in-environment perspective. In other words, social work is focused on understanding and helping individuals within their unique familial, social, and cultural circumstances and also attempts to influence larger societal systems to enhance people's opportunities. Because it recognizes the complexity of interactions between human beings and their environment, social work draws on various theories of human behavior and social systems, and utilizes a variety of skills and methods consistent with a holistic biopsychosocial focus. Current discourse frequently focuses on the question of how to establish and define evidence-based practices (EBP). Various authors suggest that EBP ought to consist of a sound knowledge base for social work that includes necessary empirical data, but also recognizes local and indigenous knowledge that is specific and relevant to a given context, as well as the wisdom born of practitioners' experience and insights, the experiences and voices of clients, and should heed the values espoused by the profession.

## **The Strengths Perspective**

One central value in social work is dedicated to empowering disadvantaged and oppressed populations by recognizing and supporting the strengths and capacities inherent in individuals, families, and communities. The *strengths perspective*, a term coined by Dennis Saleebey, acknowledges personal and societal difficulties and dysfunctions but emphasizes the need to elicit and build upon the resources, hopes, and resiliencies in people and communities. This approach traces back to social work pioneers such as Jane Addams, Virginia Robinson, and Bertha Capen Reynolds, and finds more recent contributions in the empowerment work of Paulo Freire, Barbara Solomon, Lorraine Gutierrez and others. The strengths perspective rests on humanistic and postmodern constructionist assumptions that all people and communities have resources and capacities, and that foregrounding and investing in these capacities helps coconstruct opportunities for hope, agency, resiliency and positive development. The strengths perspective has been operationalized and researched for case management with people with persistent and severe mental illnesses. It seeks and awaits additional forms of operationalization for fields other than case management by, for instance, looking to philosophically related approaches such as solution-focused and narrative work in therapy, or the community development approach by psychologist Roger Mills. Further work toward a more expansive and rigorous evaluation of the theoretical and practical merits of the strengths perspective is still needed.

SEE ALSO: ► Saleebey, Dennis

# Solution-Focused Brief Therapy

Insoo Kim Berg

*Brief Family Therapy Center*

As the name suggests, the *solution-focused brief therapy* (SFBT), also called *solution-focused therapy* or *solution-building practice*, is future-focused, goal-directed, and focuses on solutions, rather than on problems that brought clients to seek therapy. This approach to therapy was developed by de Shazer, and Insoo, Kim, Berg, and their colleagues beginning in late the 1970s in Milwaukee, Wisconsin. The developers observed hundreds and hundreds of hours of therapy over the course of many years, noting the questions, behaviors, emotions, and human aspects of the interactions. In addition to paying attention to what impact these activities had on the clients, they also observed therapist activities. Questions and activities related to clients' reports of progress were saved and those that were not were discarded. The entire model was developed inductively in an outpatient mental health service setting without screening of clients. Since then, SFBT has not only become one of the leading schools of brief therapy, but it has become a major influence in such diverse fields as business, social policy, education, criminal justice services, child welfare, and domestic violence offenders treatment.

Described as a goal-driven model, SFBT emphasizes clear, concise, behavioral and realistic goal negotiations as its hallmark. Based on its core assumptions that clients hold keys to their solutions, the professionals' task is to guide the client to construct solutions that fit his or her vision of improved life. Known for its highly respectful approach with clients, it assumes that all clients have some knowledge of what would make their life better, even though they may need some (at times, considerable) help describing the details of their better life. In addition, SFBT also presupposes that everyone who seeks help already possesses all the minimal skills needed to create solutions. Unlike most psychology and therapy approaches, SFBT is very aware of client's social contexts as a resource because the practitioners are aware of how important client's social environments are to maintaining solutions, as well as influencing the intensity of problems. Many practitioners have taken the model and expanded its scope to contexts in which people want to get along or must work together for greater goods. For example, businesses are finding that the principles of SFBT apply in management and supervision practices.

## Key Concepts and Tools of SFBT

All therapy is a form of specialized conversation and SFBT pays close attention to how this conversation is directed toward achieving clients' visions of solutions. Several tools, including finding exceptions, the miracle question, scaling questions, and coping questions, characterize the use of SFBT.

### Finding Exceptions

In the early 1980s the team discovered that problems do not occur all the time; that is, even the most serious and difficult problems are a little bit less severe at times. For example, couples who fight can get along at times, depression can be more and less severe, and clients who hear voices have times when they do not hear voices, or even if they do, they can still function reasonably well in such tasks such as housekeeping and taking care of themselves. Recognizing this led to a discovery that rather than paying attention to how a problem starts and is maintained, it may be more profitable to learn about how and when a person notices a slight improvement in their situation. For example, when a person is a bit less depressed, what else is going on in his or her social context at that time, and what they do differently as a result of this small change. Once details of this exception are described in concrete, behavioral and measurable form, the next step is to get clients to repeat those successful steps they already knew how to do, until their life is better enough that they are satisfied with therapy. Depending on a client's confidence about how well they can keep making these small changes that increase the likelihood of maintaining solutions, the case can be terminated. This aspect of treatment is what leads to the brief part of the name. Since the solutions are generated by the client, based on what they already know how to do, there is no need to impose new and unfamiliar behaviors that take time and consistent repetition to master and maintain.

### Miracle Question (MQ)

This unique tool is a powerful technique in generating the first small steps of solution states by helping clients to describe small, realistic, and doable steps they can take as soon as "tomorrow morning." Developed out of desperation from a client case of a suicidal woman with an alcoholic husband and four "wild" children who gave her nothing but grief, the woman was desperate for solutions. Since this initial encounter with this woman who thought that she might need a miracle to get her life in order, the MQ has been tested hundreds and thousands of times around the world, in many languages. The most recent version is as follows:

- T: I am going to ask you a rather strange question . . . that requires some imagination on your part . . . do you have good imagination?
- C: I think so, I will try my best.
- T: Good. The strange question is this: After we talk, you go home (go back to work), and you still have lots of work to do yet for the rest of today (list usual tasks here). And it is time to go to bed . . . and everybody in your household is sound asleep and the house is very quiet . . . and in the middle of the night, there is a miracle and the problem that brought you to talk to me about is all solved. But because this happens when you are sleeping, you have no idea that there was a miracle and the problems are solved . . . so when you are slowly coming out of your sound sleep . . . what would be the first small sign that would

- make you wonder . . . there must've been a miracle . . . the problem is all gone!  
How would you discover this?
- C: I suppose I would feel like getting up and facing the day, instead of wanting to cover my head under the blanket and just hide there.
- T: Suppose you do, get up and face the day, what would be the small thing you would do that you didn't do this morning?
- C: I suppose I would say good morning to my kids in a cheerful voice, instead of screaming at them like I do now.
- T: What would your children do in response to your cheerful "good morning?"
- C: They would be surprised at first to hear me talk to them in a cheerful voice, and then they would calm down, be relaxed. God, it's been a long time since that happened.
- T: So, what would you do then that you did not do this morning?
- C: I would crack a joke and put them in a better mood.

These small steps become the building blocks of an entirely different day. Notice how the solutions are generated by the client and the mothers' knowledge of her children's needs. This question, the longest of SFBT, has a hypnotic quality to it. Most clients visibly change in their demeanor and some even break out in smiles as they describe their solutions states. The next step is to find out when was the most recent times when client has had small pieces of miracles (called exception) and get them to repeat these forgotten experience. It is usual to see clients' outlooks change, in recognition that they have had those good mornings in a not-too-distant past.

### Scaling Questions

Scaling Questions (SQ) can be used when there is not enough time to use the MQ or it would be useful to help clients assess their own situations, track their own progress, and how others would evaluate their progress on a scale of 1 to 10. It is versatile to use in different situations, including with children and others who have impaired verbal skills. A therapist can ask about a client's motivation and hopefulness, how depressed and how confident they feel, progress they have made, and a host of other topics to track their performance and determine what the next small steps might be. For example, consider the following situation in which a couple sought help to decide whether their marriage could survive or they should get divorced. They reported that they have fought for 10 of the 20 years of their marriage and they do not want to fight anymore.

- T: Since you two know your marriage better than anybody, suppose I ask you this way: On a scale of 1 to 10, where 10 stands for you have every confidence that this marriage will make it, and 1 stands for the opposite, that we might just as well walk away right now and it's not going to work, what number would you give your marriage? (After a pause, the wife speaks first.)
- W: I would give it a 9. (Husband flinches as he hears this.)

- T: (To the husband.) What about you? What number would you give it?  
 H: (He thinks about it a long time.) I would say I am at 1.1.  
 T: (Surprised.) So what makes it a 1.1 rather than a 1?  
 H: I guess it's because we are both here tonight.

SFBT looks for the smallest possible solutions to build on, as well as viewing clients as the experts on their own situations. SQ makes problems and solutions much more tangible and concrete, while recognizing that clients' scales are entirely subjective and one client's 5 might be very different than another client's 5. Even so, SQ gives us a general idea of a client's perception that their life is getting better or worse in ways that words might not be able to convey. Most disagreements or arguments are conducted with words, and people in many intimate relationships often assume they know what the other means. The scale gives much clearer picture of the differences or similarities. The wife in the above case was shocked to discover that her husband saw things in much bleaker ways than she did, and their marriage at such high risk of divorce, after 10 years of fighting, using words. She realized that she really did not want the divorce and sprang into action of changing herself from being a critical person to a more "reasonable" person. When both agreed, they were about 6 or 7 in their confidence about the marriage making it, and the couple eventually ended the therapy.

### Coping Questions

These types of questions are powerful reminders that all clients are doing much more than they first think and recognize, and that they have been doing a great deal of useful things in spite of overwhelming difficulties. Even in the midst of despair, many clients do manage to get out of bed, get dressed, feed their children, and engage in other activities that take enormous effort to do. The therapist's ability to notice these small, but significant hidden resources and strength and determination helps cast an entirely different light on their abilities and motivations. "How do you do it?" is an empowering question that opens up a different way of looking at client's resiliency and determination.

### Benefits of the SFBT Model

As mentioned previously, the SFBT model was developed in real-life settings without screening clients, including those who were mandated by the courts, employers, schools, and other institutions. SFBT principles can and are being adapted to work with many populations outside of therapy or counseling offices. SFBT believes that problems and solutions are defined in social contexts; therefore, we cannot separate these issues outside of their environmental concerns, mandates, and resources.

The simple and easy to understand principles and tools for useful conversations with SFBT are written about extensively, not just by developers of the model but

also their affiliates and students. SFBT is widely accepted as a useful, efficient practice model across languages and cultures.

More than anything else, the efficiency and brevity of SFBT is attractive at a time of ever-diminishing resources within mental health care. Because all people, even children, have ideas of what kind of solutions might work for them best, the principle of listening and soliciting client's ideas for solutions is an attractive alternative to expert-driven therapy models. Many clinicians report reduction of professional burnout and stress of feeling like they are dealing with "resistive" clients.

As simple and easy to learn the SFBT model may seem, however, it is difficult to practice, simply because the nonexpert orientation may seem counterintuitive to some. The radical acceptance of clients as people who have sufficient wisdom to know what they need, and that they do not need to be told what to do by the "expert" seem difficult to practice for some. Minimum intrusiveness in the life of the client is the rule, and this is sometimes a difficult concept to accept for those young and inexperienced therapists who are eager to offer help to those in great deal of pain and suffering.

## **Research about SFBT**

Even though SFBT is an inductively developed model, there has been consistent interest in learning whether or not the approach really works. Because of its clinical philosophy, initial research efforts tended to rely on client self-reports. Since then, increasing number of studies have been generated, many with randomized comparison groups. For example, researchers have studied the effects of SFBT on the prison recidivism in Hageby Prison in Stockholm, Sweden. This randomized study compared those clients who received an average of 5 SFBT sessions and those who received their usual services, and participants were followed at 12 and 16 months after discharge from prison. The SFBT group consistently did better than the control group.

Other reviews of strongly controlled and randomly controlled studies of SFBT with adults and youth in the United States and Europe have provided initial support for the effectiveness of its use. In 2001 Gingerich and Eisengart reviewed 18 controlled-outcome studies of SFBT and identified client improvement in 17 of the studies, with statistically significant changes in 10 of these. In the 11 studies that compared SFBT to other treatment options, 7 studies reported more positive outcomes with SFBT. Outcome studies of SFBT offer preliminary support for the effectiveness of SFBT to clients. More microanalysis research into the coconstruction process in solution-focused conversation is needed to develop an additional understanding of how clients change through participating in these conversations.

SEE ALSO: ► Strengths perspective (social welfare)



## Spiritual Well-Being

Edward R. Canda  
*University of Kansas*

### Spiritual Well-Being in Historical Context

Spiritual well-being, a perennial and universal concern in human cultures, can be considered a quality of developing and being that is oriented to ultimate or sacred concerns, alleviates personal and collective suffering, provides a sense of meaning and purpose to life and death, and fosters optimal human development and fulfilling relationships. On the most general level, all religions posit beliefs about the nature and fundamental causes of human suffering (such as associated with illness, death, disasters, and life crises); ways to prevent, cope with, and transcend suffering (such as personal behaviors, collective rituals, moral codes, and mutual support systems for happiness, healing, salvation, or enlightenment); and positive spiritual qualities of persons and communities that facilitate a morally good and personally satisfying life.

To this point, writings in positive psychology on spirituality and spiritual well-being have been influenced most by European and American traditions of psychology and allied disciplines and professions, with some allusion to cultural and religious diversity. Some significant precursors to positive psychological study of spiritual well-being include G. Stanley Hall (1844–1924), who advocated for the objective study of religion, including use of questionnaires and statistical analysis, while also advocating for appreciation of Jesus as an exemplar of transformation toward higher positive ideals; William James (1842–1910), who utilized introspective and religious autobiographical studies to explore the varieties of religious experience and their fruits in virtue, saintliness, and social benefit; Carl Jung (1875–1961) who analyzed clinical observations and cross-cultural study of mythology and religions to discuss spiritual aspects of human nature and development; and Abraham Maslow (1908–1970) who focused on the highest human potentials for creativity, love, spiritual insight, and self-transcendence. Positive psychological study of spiritual well-being reflects some of their interests, such as empirically based knowledge, optimal human development, character strengths, and resilient response to challenges. The concept of spiritual well-being is usually defined and operationalized for use in empirical research (especially as subject to statistical analysis) or clinical assessment.

### Defining, Measuring, and Assessing Spiritual Well-Being

Definitions of *spiritual well-being* rest on definitions of spirituality and religion. “Both spirituality and religion are complex phenomena, multidimensional in nature,

and any single definition is likely to reflect a limited perspective or interest” (Hill et al., 2000, p. 52). These authors point out that the terms *religion* and *spirituality* are not used or defined consistently in psychology or related fields. Further difficulties may arise because definitions often reflect theoretical and worldview assumptions that are not made explicit, may create religious or cultural biases, and may be conceptually and operationally problematic. Variations in use of these terms – and related terms such as *spiritual well-being*, *spiritual wellness*, *spiritual health*, *religiousness*, and *religiosity* – make it difficult to compare and evaluate both empirical and theoretical studies.

Yet it has become common in psychology, social work, psychiatry, nursing, and related fields to differentiate between spirituality and religion as related but distinct concepts. Spirituality often refers to feelings, beliefs, values, experiences, and behaviors that concern the search for a sense of meaning, purpose, and fulfilling relationships in the context of a person’s understanding of that which is ultimate, sacred, or of fundamental life significance. Religion involves the expression of spirituality through participation in organized communities and traditions that share these ultimate concerns. For example, the positive psychologists Snyder and Lopez (2007, p. 262) define spirituality as, “the thoughts, feelings, and behaviors that fuel and arise from the search for the sacred.” In such formulations, spirituality may be expressed in religious and/or nonreligious ways.

Similar distinctions impact operationalization of spiritual well-being in tools for measurement research and clinical diagnosis and assessment. For example, the Spiritual Well-Being Scale, developed by Craig Ellison and Raymond Paloutzian, includes 10 items each for existential well-being (i.e., related to a person’s level of life perspective, meaning, and purpose) and religious well-being (i.e., view of God and sense of positive relationship with God). The concept “religious” is distinguished here by belief in God or a higher power. The more extensive Spiritual Well-being Questionnaire, developed by David Moberg, addresses beliefs and attitudes, social activities, feelings about life, religious activities and identity. Various items relate to the theme of meaning and purpose while others relate to specifically religious issues. Some items use Christian terms. The more recent Spirituality Index of Well-Being (developed by Timothy Daaleman and Bruce Frey) focuses on self-assessments of insight, ability to solve problems, and sense of purpose and meaning in life. There are numerous other instruments dealing with religious and spiritual beliefs, behaviors, values, and coping practices that are relevant to spiritual well-being. Two helpful compendia with critical reviews are: *Measures of Religiosity* edited by Peter C. Hill and Ralph W. Hood and *Handbook of Religion and Health* by Harold Koenig, Michael McCullough, and David B. Larson.

A new clinical diagnostic category has been added in the field of nursing, “readiness for enhanced spiritual well-being” (Anonymous, 2002, p. 68). This is defined as, “ability to experience and integrate meaning and purpose in life through a person’s connectedness with self, others, art, music, literature, nature, or a power greater than oneself.” In positive psychology, Peterson and Seligman include in the VIA classification of virtues and strengths a category with qualities commonly

associated with the concept of spiritual well-being, such as transcendence, a strength that facilitates connections to the larger universe and provides purpose and meaning. This category includes appreciation of beauty and excellence, gratitude, hope, humor, and spirituality. Spirituality is defined as "Having coherent beliefs about the higher purpose and meaning of the universe."

Within tools currently available through the Authentic Happiness website, [www.authentichappiness.sas.upenn.edu](http://www.authentichappiness.sas.upenn.edu), hosted by Martin Seligman, various items address spiritual well-being related qualities. For example, the Authentic Happiness Inventory includes an item about sense of purpose or meaning in life. The Approaches to Happiness Questionnaire includes items about a sense of one's life having a higher purpose and meaning and being of benefit to other people. The Meaning in Life Questionnaire focuses entirely on sense of life meaning and purpose. VIA Signature Strengths includes a self-rating of how spiritual a person one is.

Tools for clinical assessment of spiritual strengths and resources related to spirituality and positive forms of spirituality have emerged within counseling psychology and social work, though they do not always use the term spiritual well-being. These tend to address both religious and nonreligious forms of spirituality, encompass more detail than the structured quantitative research tools, and allow flexibility and adaptability for in-depth ongoing conversations that match the terms and beliefs of the client. For example, the Spiritual Strengths Assessment, developed by Eichler, Deegan, Canda, and Wells:

offers a method for identifying the spiritual strengths and resources of clients who wish to mobilize spiritual aspects of their lives to promote their mental health and overall well-being, to respond to life challenges resiliently, and to help recover from crises and mental illness. (2006, p. 69)

An inventory developed for the counseling field explores dimensions of spiritual wellness, including conception of the absolute/divine, meaning, connectedness, mystery, spiritual freedom, experience/ritual, forgiveness, hope, knowledge/learning, and present-centeredness (Faiver, Ingersoll, O'Brien, & McNally, 2001). Some of the items use theistic language.

## Challenges and Opportunities

Within positive psychology and related fields, the burgeoning attention to spirituality and religion highlights a significant aspect of life. The concept of spiritual well-being, in particular, aids in research and clinical assessment revealing intrapersonal, interpersonal, and institutional strengths and resources that may promote resilience, coping, and optimal human development. This early stage of the field offers challenges and opportunities.

The variability of terms, definitions, and measures can create confusion. But care can be taken to make these clear in each study, in comparative or meta-analytical studies, and in clinical tools. Perhaps the most commonly used features of the

concept of spiritual well-being are: positive sense of meaning and purpose in life. Some instruments focus exclusively on this, while some include relatedness with the sacred, transcendence, and a general sense of positive connectedness. Some scholars prefer a broad conceptualization, without reference to religion or sacredness, in order to be widely applicable. Other scholars believe that a conceptualization is vacuous without reference to particular religious contexts or at least the dimension of sacredness.

Structured surveys, conducive to nomothetic research, can be complemented by qualitative studies of spiritual well-being that elucidate rich detail and depth of meanings and daily life for individuals and communities. Positive psychological study of spiritual well-being might be enhanced by greater use of multiple methods of inquiry and wider connection across disciplines.

Measurement and clinical assessment of spiritual well-being could be advanced by the development of population-specific definitions, tools, and methods that are sensitive to diverse cultures and spiritual perspectives. Research and assessment tools that are intended for large populations or comparative study can be revised to eliminate religious or worldview biased language, unless these are options from among many that respondents may choose.

Philosophical questions arise from the assumptions implicit in common measures of spiritual well-being. There is an assumption that a clear sense of life meaning and purpose is positive and that it can contribute to other aspects of well-being, such as coping with illness. Although this may be supported by empirical evidence in general, many religious traditions and spiritual perspectives point out that spiritual well-being is a process that may involve crises of meaning, purpose and faith that are crucial for spiritual development. For example, according to the Biblical story of Job, he did not find a satisfactory answer about why he was tormented with personal loss, pestilence, and sickness. In a vision, God spoke from an awesome whirlwind about that which is beyond human understanding. In existential psychology, despair, doubt, confusion, alienation, shame, and guilt can be signs of spiritual well-being (i.e., authenticity) in response to confrontations with oppression, conformist faith, and narcissism. In transpersonal psychology, optimal adult spiritual well-being is associated with transcendence of a view of self and reality rooted in egocentric identifications, pleasures, meanings, and purposes. Some approaches to spiritually based activism, such as the nonviolent resistance of Gandhi and King, view spiritual well-being as a collective ideal and quality for loving and just communities in which well-being of self and others are inextricable. Positive psychology could further explore these insights in refining the concept of spiritual well-being.

SEE ALSO: ► James, William ► Religiousness ► Spirituality  
► Well-being

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## Spirituality

Kenneth I. Pargament  
Bowling Green State University

The term *spirituality* comes from the word *spirit* (to breathe) and there is general agreement that spirituality is a living, dynamic process that is oriented around whatever the individual may hold sacred. The *sacred* refers to concepts of God and transcendent reality as well as other aspects of life that take on divine character and significance by virtue of their association with the holy. Thus, the sacred can encompass material objects (e.g., crucifix, American flag), special times (e.g., the Sabbath, birth and death), special places (e.g., cathedral, the outdoors), relationships (e.g., marriage, parenting), and psychological attributes (e.g., soul, virtues). Spirituality can be defined as a search for the sacred, that is, an attempt to discover and hold onto the sacred and, when necessary, transform the sacred.

In their search for the sacred, people take a variety of spiritual pathways. These paths include traditional or nontraditional organized religious beliefs (e.g., God, afterlife, karma), practices (e.g., prayer, meditation, rituals), experiences (e.g., mysticism, conversion), and institutions (e.g., church attendance, Bible study). Pathways to the sacred may also take nonreligious forms, such as walking in the outdoors, journaling, listening to music, scientific study, intimate relations with others, or participating in sociopolitical action.

Over the course of the lifespan, the search for the sacred can unfold in many directions. For some, spirituality is a relatively smooth, stable process. For others, spirituality involves sharp shifts in spiritual pathways and understandings of the sacred itself. Some embed their spirituality in a traditional religious milieu. Others leave traditional religious settings and pursue more individualized spiritual pathways and destinations. Still others join and leave a variety of religious contexts, traditional and nontraditional, over their lives. Spirituality is, in short, a rich, complex, and multiform process.

## History

The topic of religion was a vital concern for the founding figures of psychology. Psychologists such as William James, Edwin Starbuck, and G. Stanley Hall viewed religious and spiritual phenomena (e.g., mystical experience, conversion) as central to the study of human behavior. For much of the twentieth century, however, psychology distanced itself from religion, perhaps because the young field was concerned about demonstrating its credentials as a scientific discipline. Those who did devote attention to religious issues, such as Sigmund Freud, tended to be highly critical about religious matters. Religion was often described as irrational, delusional, or a source of pathology.

This picture began to change in the latter part of the twentieth century for several reasons. First, the *zeitgeist* of the field shifted to a focus on positive psychological constructs, including constructs often laden with spiritual meaning (e.g., forgiveness, gratitude, meaning, growth, acceptance, love). Second, theorists and researchers distinguished spirituality more sharply from institutional religious affiliation, beliefs, and practices. Third, empirical studies revealed that spiritual beliefs and practices are commonplace in the United States, with a large majority of people reportedly believing in God, believing in an afterlife, defining themselves as spiritual and religious, and seeing “God’s presence in all of life.” Finally, empirical research also demonstrated significant, often positive, linkages between spirituality and health and well-being. Thus, there was an eightfold increase in the number of published articles on spirituality in psychological and behavioral science journals from 1965 to 2000.

## How Spirituality Works

Having shown that many people in the United States are spiritually involved and that spirituality is linked to health and well-being, researchers are currently taking a closer look at how spirituality works in peoples’ lives. Although this research is still in process, several preliminary conclusions appear to be warranted.

### The Sacred Elicits Spiritual Emotions

The experience of sacredness is accompanied by a sense of transcendence (i.e., being connected to something that goes beyond oneself), boundlessness (i.e., infinite time and space), and ultimacy (i.e., being in touch with what is “really real”). Theologian Rudolf Otto noted that the idea of the divine is often accompanied by a *mysterium*, a complex of feelings of attraction (e.g., love, adoration, gratitude) and repulsion (e.g., repulsion, fear, dread). More recently, researchers have linked perceptions of the sacred to a variety of emotion-based responses, including peak experiences, mystical experiences, and feelings of responsibility, duty, humility, awe, elevation, and uplift.

### The Sacred becomes an Organizing Force

As the source of powerful emotions, the sacred becomes a passion and a priority. People feel drawn to, or even grasped by, the sacred and, as a result, they begin to invest more and more of themselves in sacred pursuits. For example, studies have shown that people who sanctify the environment (i.e., view the environment as sacred) are more likely to invest financially in environmental causes. Similarly, people direct more of their time and energy to sacred strivings than nonsacred strivings. In the process of building their lives around the sacred, people look to the sacred to lend greater coherence to disparate thoughts, feelings, actions, and goals by integrating their competing aspirations into a unified life plan.

### The Sacred becomes a Resource

Sacred beliefs, practices, experiences, values, and relationships often serve as resources that people can draw on for strength, support, and satisfaction in their lives. A large body of research points to the positive implications of several spiritual pathways for individual health and well-being. Prayer and meditation, beliefs in a loving God, attendance at religious services, positive spiritual coping, and perceptions of various aspects of life as sacred have all been associated with indices of greater psychological, social, physical, and spiritual well-being. For example, in one study of patients undergoing kidney transplant surgery and their loved ones, those who engaged in positive religious coping reported greater life satisfaction 3 months and 12 months after transplantation. In a meta-analysis of 42 studies on the effects of transcendental meditation, this practice was tied to a greater number of transcendental experiences and these experiences were, in turn, associated with significant psychological and physical change. Yet another longitudinal study focused on 100 people with HIV. People who reportedly became more spiritual and religious after their diagnosis showed significantly greater preservation of T-helper (CD4) cells and better control of their viral load over the 4-year period of the study.

### The Sacred becomes a Source of Struggle

Despite the clear benefits of spirituality for health and well-being, spirituality can become a source of stress and strain when people perceive that the sacred has been threatened, damaged, or violated. In times of stress, people may experience divine struggles (e.g., feeling angry at, abandoned or punished by God), intrapsychic struggles (e.g., questions and doubts about dogma, beliefs, and behaviors), or interpersonal struggles (e.g., spiritual conflicts with clergy, family, friends, or others). Spiritual struggles such as these are by no means trivial. They appear to represent a fork in the road to decline or growth. On the one hand, spiritual struggles have been consistently and robustly tied to a variety of poorer outcomes, including poorer mental health, poorer physical health, and even greater risk of

mortality. On the other hand, spiritual struggles have been linked to reports of greater stress-related growth and transformation. Researchers are currently attempting to identify those factors that determine whether spiritual struggles lead to growth or decline.

## Future Directions

The psychology of spirituality has advanced rapidly in recent years. In the future, advances are likely to continue both in research and in practice.

### Why Spirituality Works

Although it has become clear that spirituality has important implications for individuals' health and well-being, a key question remains: how do we account for the spirituality-health connection? Theorists and researchers have offered and begun to examine a number of potential explanations for the relationships between spirituality and health and well-being. These include:

- Behavioral explanations (e.g., spirituality encourages good health practices that are, in turn, tied to better health and well-being).
- Psychological explanations (e.g., spirituality offers a sense of meaning, coherence, esteem, identity, hope, empowerment, and comfort that facilitates health and well-being).
- Social explanations (e.g., spirituality facilitates social connectedness, social support, and a sense of intimacy that promotes health and well-being).
- Physiological explanations (e.g., spirituality produces changes in brain, immune system, and autonomic system functioning that are associated with better health and well-being).

As yet, researchers have not been able to fully account for the links between spirituality and health through the explanations noted above. It is possible that further empirical studies will provide a clearer picture. However, it is also possible that there is something distinctive, even unique, about spirituality that accounts for the spirituality-health connection. The power of spiritual pathways such as prayer, meditation, rituals, attendance at religious services, and spiritual coping methods may lie in the fact that they are tied to perceptions of the sacred. Similarly, at least part of the power of the great virtues – forgiveness, humility, gratitude, compassion – may lie in the fact that they are often grounded in spiritual values and worldviews.

### Spiritually-Sensitive Change

For a number of years, practicing psychologists tended to minimize or overlook the spiritual dimension of clients' lives. Yet, this stance has become increasingly



untenable with the growing recognition that: many clients are spiritually-oriented; many clients prefer spiritually-sensitive practitioners; that spirituality is a potent resource for many people who experience problems; and that spirituality can also be a part of the problem that leads people to seek help.

Recently, psychologists have begun to develop and assess the efficacy of spiritually integrated forms of psychotherapy. Treatments drawing on spiritual resources (e.g., prayer, meditation, spiritual reframing, ritual) have been implemented for a variety of groups facing a variety of problems: women with eating disorders, drug abusers, people with HIV/AIDS, ex-spouses dealing with anger and resentment, survivors of sexual abuse, and people with social anxiety, depression, and serious mental illness. Spiritually-integrated treatments are still in an early stage of development and further evaluation is needed. Nevertheless, initial studies have yielded promising results.

Psychologists have also started to attend more closely to spirituality in other contexts, including premarital education, medical care, and preventive programming in congregations. In short, psychologists are beginning to weave sacred matters more fully into their efforts to understand human behavior, prevent problems, ameliorate distress, and promote well-being.

SEE ALSO: ► Coping ► James, William ► Religiousness

## **Sport Psychology**

Megan E. Brent<sup>a</sup> and Adrienne Leslie-Toogood<sup>b</sup>

<sup>a</sup>University of Kansas; <sup>b</sup>Kansas State University

*Sport psychology* is the scientific study of psychological factors associated with sport participation and performance and the practical application of this knowledge to assist athletes in enhancing performance and achieving optimal mental health. Sport psychology as a discipline is similar to positive psychology in that the primary focus is on building human strengths and striving for optimal experiences. Topics researched and applied by sport psychologists include peak performance, mental skills such as imagery and self-talk, relaxation techniques, leadership, goal setting, motivation, attention and concentration, team dynamics, personality factors, gender and multicultural issues, coaching effectiveness, athletic identity, injuries, burnout, unhealthy behaviors such as substance abuse, psychological concerns such as depression and anxiety, ethical issues of research and practice, and the impact of sport participation on development and well-being.

Sport psychology is a relatively new field, and the origins can be traced to the former Soviet Union and Eastern Europe. The exceptional performances of athletes from these respective countries at various Olympic Games led to increased interest in the application of this sport science. Weinberg and Gould suggest that the historical development of the field can be divided into six eras:

the early years (1895–1920), the Griffith era (1921–1938, named after Coleman Griffith, who established the first sport psychology research lab at the University of Illinois), preparation for the future (1939–1965), establishment of academic sport psychology (1966–1977), multidisciplinary science and practice in sport and exercise psychology (1978–2000), and contemporary sport and exercise psychology (2000–present).

Currently, sport psychology professionals engage in several activities including teaching, research, consulting, and counseling. Team consulting, coaching clinics, individual and group counseling, and life-skills programs may be utilized to address topics such as team dynamics, performance enhancement, and developmental issues. Sport psychologists with clinical training may work with athletes in counseling to manage psychological concerns such as depression, anxiety, and eating disorders. This has training implications for students interested in pursuing a career in sport psychology, and the preferred educational background of future professionals is a topic of frequent debate within the field. In general, students are trained within either a sport science/kinesiology program or a clinical/counseling program. Those trained within a psychology program may be eligible for licensure as a psychologist, and they are the only professionals legally allowed to use this title as a component of their practice. Notably, the Association for the Advancement of Applied Sport Psychology strongly encourages consultants to have training from both kinesiology and psychology, and this is a requirement for their certification process.

*Peak performance* is a notion that athletes, coaches, and sport psychologists constantly strive to understand and facilitate in the world of sport. In 1975, Mihaly Csikszentmihalyi introduced the concept of *flow*, which is discussed in both sport psychology and positive psychology literature. Flow is associated with enjoyment of an activity for its own sake and the occurrence of peak performances. According to Jackson and Csikszentmihalyi, when athletes were asked to describe the experience of flow, nine fundamental components emerged: balance between challenge and skills, action-awareness merging, clear goals, unambiguous feedback, concentration on the task at hand, sense of control, loss of self-consciousness, transformation of time, and autotelic experience. In 1980, Yuri Hanin introduced the individualized zones of optimal functioning (IZOF) model. Research by Jokela and Hanin has validated this concept that an athlete will perform best with an arousal level within the individual's optimal zone. Sport psychologists assist individual athletes in identifying their own optimal mental, emotional, and physical states for peak performance. Strategies such as positive self-talk, imagery, relaxation, and biofeedback training may help athletes in regulating arousal level, reaching the zone of optimal functioning, and facilitating the flow state.

Sport psychologists teach many skills when working with athletes, including imagery, relaxation, concentration, goal-setting, and positive self-talk. Self-talk refers to a person's cognitions (i.e., thoughts). In the field of positive psychology, the importance of positive thinking is discussed relative to concepts such as optimism, attribution theory, and self-efficacy. In the field of sport psychology, self-talk

typically refers to the messages athletes give themselves regarding their abilities and sport performance. The sport psychology literature demonstrates that positive self-talk is linked to athletic success, while negative self-talk such as "I'm not good enough" contributes to performance-hindering anxiety. Sport psychologists guide athletes in monitoring and managing their self-talk. One popular strategy developed by Beck is known as *cognitive restructuring*, a technique that involves identifying negative patterns of thinking and learning to replace them with realistic, self-affirming, success-oriented statements. For example, an athlete who thinks, "This is going to be impossible, and I am afraid I will lose," may replace that thought with the thought, "This is going to be a challenge, and I am going to perform to the best of my abilities." Negative thoughts are inevitable in athletics; the key to positive thinking is awareness of one's thoughts and the ability to transform negative self-talk into positive messages.

For many athletes, participation in sport is a primary source of self-worth. An individual who places great importance on sport involvement is described as possessing a strong athletic identity. Research has shown that athletes with strong athletic identities may benefit from high self-esteem, life satisfaction, and purpose in life while they are still involved in athletics. The positive psychology literature refers to the importance of pursuit of meaningfulness in life. The transition out of athletics is often more difficult when an individual has focused solely on sport at the expense of other possible interests, a phenomenon known as *role foreclosure*. At the end of their athletic careers, former athletes may wonder who they are and what purpose they have in life. This is a particularly difficult transition when retirement from athletics is involuntary following an injury. Individuals may believe they were unable to realize their full athletic potential or accomplish their sport-related goals. They may also miss the strong support system they had as an athlete. Sport psychologists assist individuals in preparing for the transition out of sport, coping with the transition process, identifying transferable skills such as teamwork and leadership, exploring interests outside of sport, and engendering hope for a meaningful future beyond athletic participation.

There are several professional associations connected with the field of sport psychology, including the Association for the Advancement of Applied Sport Psychology (AAASP), Division 47 of the American Psychological Association (APA), the North American Society for the Psychology of Sport and Physical Activity (NASPSPA), and the International Society of Sport Psychology (ISSP). Most of these associations host annual conferences, with the latter hosting a World Congress every few years. Key professional journals include *The Sport Psychologist*, *The Journal of Sport and Exercise Psychology*, *The Journal of Applied Sport Psychology*, *The Psychology of Sport and Exercise*, and *The International Journal of Sport Psychology*. Publishers in the area include Fitness Information Technology (housed at West Virginia University) and Human Kinetics. *The Directory of Graduate Programs in Applied Sport Psychology* includes a listing of graduate preparation programs in Canada, the United States, Australia, Great Britain, and South Africa. *The World Sport Psychology Sourcebook* includes a good description of key sport psychology applications from around

the world. *The Directory of Psychological Tests in Sport and Exercise Sciences* includes a listing of most tests used by sport psychology practitioners.

SEE ALSO: ► Flow ► Hope ► Meaning

## Stanton, Annette

Jennifer Austenfeld

*University of Kansas*

Annette Stanton (b. 1955) has provided new insights into the adaptive role of emotion in the coping process and has elucidated factors that enhance adjustment to cancer, reproductive problems, and other adverse health conditions. Stanton, a graduate of the University of Kansas and the University of Connecticut, has received numerous awards recognizing excellence in research, teaching, and mentorship, including the Senior Investigator Award for Outstanding Contributions to Health Psychology by Division 38 (Health Psychology) of the American Psychological Association. She became interested in stress and coping research during her early clinical work when she observed the substantial individual variability in coping responses to illness. She began to study the role of emotion in coping and identified an intriguing discrepancy between the coping research literature and studies of emotion in other diverse fields. Many coping studies described an association between “emotion-focused coping” (i.e., attempts to palliate negative emotions in stressful situations) and maladaptive outcomes, such as symptoms of anxiety or depression. These findings conflicted with work in other disciplines establishing the adaptive importance of emotion in response to environmental challenges through, for example, focusing attention and prioritizing behavioral responses. In a series of studies, Stanton provided insight into this discrepancy by demonstrating that many items designed to measure emotion-focused coping in several widely used coping questionnaires also contain expressions of distress or self-deprecation. These negatively biased items overlap with other measures of poor functioning and confound the observed association between emotion-focused coping and maladaptive outcomes.

Stanton and her research team then developed a new construct encompassing efforts to cope through the acknowledgment, understanding, and expression of emotion which they designated *coping through emotional approach*. This designation emphasizes approach toward emotional experience as a coping process, contrasted with avoidant strategies such as denial. Stanton’s team validated a new instrument to assess emotional approach coping (EAC) using items free of negative bias. The EAC measure contains two subscales: emotional processing (EP), consisting of active attempts to acknowledge and understand emotion (sample item, “I acknowledge my emotions”); and emotional expression (EE), consisting of active verbal and/or nonverbal attempts to communicate or symbolize emotion

(sample item, “I feel free to express my emotions”). Subsequent studies by Stanton and others have indicated that EAC can be adaptive in the context of several stressors such as infertility, breast cancer, and chronic pain. This research has further identified individual and environmental factors that moderate the relationship between EAC and adjustment. In general, EAC appears to be most adaptive when the stressor is perceived as relatively uncontrollable and when the individual’s social environment is receptive to emotional expression.

In a literature dominated by research identifying risk factors for maladjustment, Stanton has made significant contributions in delineating protective processes that enhance adjustment to chronic illness, with much of her work focusing on cancer and infertility. She demonstrated that women completing treatment for breast cancer who wrote either about emotions or perceived benefits of the breast cancer experience reported fewer medical appointments for cancer-related problems at 3-month follow-up, relative to a control group. In ongoing research, Stanton continues to illuminate factors that facilitate well-being and health in individuals confronting adversity.

SEE ALSO: ► Coping ► Health psychology ► Psychological adjustment

## **Stereotype Threat**

Leoandra Rogers and Joshua Aronson

*New York University*

In 1995 Claude Steele and Joshua Aronson coined the term *stereotype threat* to describe the discomfort people experience when confronted with a negative stereotype associated with their social identity. Steele and Aronson proposed that in certain situations, people become apprehensive about validating a negative group image – both in the eyes of others and in their own eyes – and this often unconscious fear can impair performance in situations where stress or distraction are disruptive (e.g., high stakes testing, public speaking, etc.).

The stereotype threat hypothesis was supported in a series of social psychology experiments evaluating the intellectual test performance of African American college students. The long-standing stereotypic image that portrays African Americans as less intelligent than whites is widely known and well established, making the academic sphere a prime context for eliciting stereotype threat. To test their hypothesis, Steele and Aronson gave African American and White students at Stanford University a difficult standardized test of verbal ability, varying the description of the test such that some students believed the purpose of the test was to measure their intelligence, whereas others were told that the test was purely a nonevaluative laboratory exercise.

The results from these landmark experiments showed a marked difference in performance among the African American students; they performed significantly worse when they believed the test was being used to diagnose their intelligence.

Moreover, in subsequent experiments, simply asking African American students to indicate their race prior to taking the test resulted in impaired performance. Importantly, these declines did not occur among the White test-takers. Because the tests were identical across testing conditions and the students were randomly assigned, the results indicated that African Americans' depressed test performance was the direct result of the way the test was presented suggesting that stereotype threat phenomenon may play a central role in African American students' much discussed academic underperformance.

These experiments garnered a good deal of attention – both in academic circles and in the popular press – because they were seen as a viable alternative explanation for the Black-White test score gap, which had been notoriously described as evidence for the genetic inferiority of African Americans in the controversial book *The Bell Curve*, published in 1994. Steele and Aronson's research was cited in two Supreme Court cases on affirmative action and is one of the most frequently cited articles in the social sciences the past decade, earning a designation as a “modern classic” in the psychological literature. Parallel findings showing that gender stereotypes likewise suppress women's test performance in mathematics further suggested the relevance of stereotype threat to sex differences in mathematics and science achievement.

Because of its relevance to politically charged issues such as affirmative action, racial and gender differences in intellectual capacity, and the predictive value of standardized tests, stereotype threat has also been the subject of controversy, its validity questioned by critics of affirmative action, proponents of genetic theories of intelligence, and by psychologists working in the testing industry. Such critics tend to accept the experimental results but question whether stereotype threat operates outside the confines of the research laboratory, and whether it contributes to the test score gap between blacks and whites and the gender gap in mathematics in the “real world.” Proponents of the theory regard it as an important advance because it illuminates the role of tractable situational factors in the test score gap, and thus suggests practicable means for addressing achievement disparities that do not require massive social changes. A series of publications report field interventions based on stereotype threat theory have successfully narrowed racial and gender achievement gaps, strongly suggesting the relevance and utility of the theory for addressing achievement disparities.

Stereotype threat can affect a variety of social groups – anyone for whom a negative stereotype exists or for whom comparisons with a “superior” group can be made salient. For instance, an elderly man forgets his keys and becomes distracted and anxious that his forgetfulness indicates, or will be seen to indicate, senility; a Latino student refuses to engage in class discussions as he is wary that his accent will mark him as intellectually inferior in the eyes of his classmates; a White male feels mathematically incompetent in class when Asian classmates are present and avoids taking advanced courses if too many Asians are enrolled – and so on. These instances exemplify the psychological impact of stereotype threat, and the physiological and behavioral responses evoked by the activation

of relevant stereotypes that serve to undermine immediate performance and ultimately lead to adaptations that can turn short-term performance deficits into enduring skill deficits. Experiments confirm that all of the above social groups suffer significant deficits in performance when stereotypes disadvantaging their group are activated.

Although stereotype threat clearly exerts a direct impact on the individual's immediate performance, the indirect pathways and the precise mechanisms through which stereotype threat interrupts performance are continuously under research. It is clear however, that stereotype threat is mediated through heightened physiological arousal, which leads to deficits in both short-term memory and what psychologists refer to as *executive function* – the ability to focus and manipulate cognitive resources. As evidence of this mediating process, researchers have shown that prior to the stereotype threat induction, if subjects are informed that they may experience anxiety and are told to attribute their heightened arousal to a factor completely unrelated to the current task, the effects of stereotype threat are attenuated.

Not all individuals experience stereotype threat to the same degree; there are important moderators. Steele and Aronson proposed that identification – the degree to which one cares about the domain or about his or her social identity – is a critical factor in stereotype threat, arguing that the impact of a stereotype will be negligible if a person cares little about task domain or the relevant social identity. For a person for whom being an African American or being a woman is a central self-definition, a negative stereotype about blacks or women is likely to be more salient and more threatening than for a person whose self-esteem is rooted in other social identities. Likewise, an individual who prides herself on her academic ability will find a stereotype threat especially meaningful and thus, more harmful. One implication of stereotype threat then, is disidentification from either the stigmatized task or social identity, in an effort to preserve self-esteem. This psychological disengagement has grave implications, particularly in the sphere of academics, and may explain the hypothesized lack of interest or concern associated with academic failure among underperforming students.

Maintaining a positive image is critical for social well-being; thus individuals subjected to stereotype threat often engage in self-image protective behaviors that can be counterproductive. A common self-protective behavior is self-handicapping, in which individuals adopt strategies (e.g., not studying prior to an exam) that deliberately preclude their success, enabling them to attribute failure to low effort rather than low ability. Likewise, stigmatized individuals often discount important feedback regarding their performance, refusing to admit their lack of knowledge or understanding. In a similar manner, some individuals will simply avoid new or challenging tasks that offer the opportunity to expand their knowledge and skill in order to resist appearing incompetent. Such adaptations protect self-esteem in the short term, but they virtually guarantee that competence in the domain will stagnate rather than grow. Thus, over the long term, psychological barriers such as stereotype threat can stunt intellectual growth just as surely as poverty or other structural barriers.

Researchers have developed a number of promising interventions for helping students cope with stereotype threat in ways that do not compromise academic achievement. By and large, these studies reveal that knowledge is perhaps the strongest defense against stereotype threat. For instance, coaching students to conceive of intelligence as malleable as opposed to a fixed, immutable entity significantly decreases the impact of stereotype threat. Likewise, teaching students about stereotype threat – how it works and its power to undermine performance in stressful situations – has shown to disrupt the phenomenon. Along with understanding the psychological mediators of stereotype threat, applying research from the laboratory and real-world settings (e.g., schools) in order to develop programs that can buffer the effects of stereotype threat continues to be a central focus of this work.

SEE ALSO: ► Cognitive appraisal ► Intelligence

## Stone, Phil

Connie Rath

*Gallup*

Philip J. Stone, a Harvard professor of psychology, was a pioneer in the field of positive psychology who also revolutionized the use of computers in the social sciences. He was ahead of his time technologically and academically. He entered the University of Chicago at age 15 and earned a doctorate in psychology and social sciences from Harvard at the age of 23. He started his teaching career at Harvard in 1960 and was on the faculty until he died in 2006.

Stone became intrigued with finding the strengths of people and led one of the first studies of Clifton StrengthsFinder with Harvard undergraduates. He became an avid writer and teacher about individual talents and their role in developing students. Students cited him as unusual in the way he saw them as more than intelligent high achievers. He was one of the first senior scientists for Gallup. He contributed to the theories of talent identification and strengths measurement through his work with Gallup professionals and senior scientists from other institutions. His innovative ideas contributed to statistical methodologies to study talents and successes and technical advances to report results of psychological assessments.

He was known internationally for the General Inquirer program which made it possible for computers to analyze text. The programs were applied to surveys and to interviews of leaders to quantitatively understand qualitative information.

Stone also consulted about workplace psychology from an environmental perspective. He helped design spaces to encourage people to interact more positively and waste less space. His consulting extended to a wide range of clients including the National Cancer Institute and the US State Department.



The positive psychology course he developed at Harvard grew to become the most requested course at the university. Tal Ben-Shahar, a protégé of Stone, has continued the course and received wide media attention for its demand and success.

SEE ALSO: ► Clifton StrengthsFinder ► Gallup

## Strengths (Gallup)

Jim Asplund

*Gallup*

### Definition

Gallup defines *strengths* as those activities for which one can provide consistent, near-perfect performance. Strengths are composed of:

- **Skills:** the basic abilities to perform fundamental tasks, such as operating a particular piece of machinery. Skills are not naturally occurring – they must be acquired through formal or informal training and practice.
- **Knowledge:** an acquaintance with, and understanding of, facts and principles accumulated through education or experience.
- **Talents:** natural ways of thinking, feeling, and behaving, such as an inner drive to compete, sensitivity to the needs of others, or the tendency to be outgoing at social gatherings. Talents must come into existence naturally and cannot be acquired like skills and knowledge.

Some aspects of personality are situation-dependent; an individual with low conscientiousness can be occasionally conscientious. Similarly, many persons can exhibit a degree of discipline when it is needed, but for most, it is not a reliable trait. To be a talent, the disposition needs to be a reliable component of one's personality.

There is growing evidence that these stable traits begin to develop at relatively young ages, and in some respects, it is those very relatively fixed talents that define an individual, in that they represent the product of all the billions of choices and circumstances that brought him or her to the present moment. These choices and the emotions associated with them lead to measurable neurochemical changes that provide a scientific basis for why talents do not change significantly over time. Individuals can develop a heightened self-awareness, they can add knowledge and skills, and they can stabilize their values and beliefs as means of developing their talents into strengths.

A person's most powerful talents represent the best of his or her natural self. Accordingly, these talents are a person's best opportunities to perform at levels of excellence. Dominant talents naturally appear frequently and powerfully, in

a variety of situations. They can take the form of yearnings, or areas of rapid learning. They can be areas of great personal satisfaction, or in which one experiences a sense of timelessness:

- A yearning can be described as an internal force that leads one to a particular activity or environment time and again.
- Rapid learning reveals talent through the speed at which one anticipates the steps of a new activity, acquires a new skill, or gains new knowledge.
- Satisfaction is a positive emotional response to successfully meeting challenges that engage one's greatest talents. These energizing experiences are often evidence of a dominant talent at work.
- Timelessness also can serve as a clue to talent. Being engaged in an activity at a deep, natural level can result in a lack of the sense of time passing, and indicates a level of engrossment in that activity that is consistent with a deep natural talent.

Once dominant talents are identified, a person can thoughtfully appeal to them and determine how often they will be expressed. The more a talent is exercised, and the more it is refined through added knowledge and skills, the more integrated and stronger it becomes.

In the 1990s, under the leadership of Educational Psychologist Donald O. Clifton, Gallup developed the Clifton StrengthsFinder (CSF) as an objective measure of personal talent that could be administered online in less than one hour.

Clifton believed that talents could be operationalized, studied, and capitalized upon in work and academic settings. He also considered success to be closely associated with personal talents and strengths in addition to the traditional constructs linked with analytical intelligence. In accordance with those beliefs, he worked to identify hundreds of themes of personal talents that predicted work and academic success, and he constructed empirically-based, semi-structured interviews for identifying these themes.

When developing the interviews, Clifton and analysts examined the prescribed roles of a person, visited the job site or academic setting, identified outstanding performers in these roles and settings, and determined the long-standing thoughts, feelings, and behaviors associated with situational success. Many of the interviews developed provided useful predictions of positive outcomes. In the mid-1990s, when considering the creation of an objective measure of talent, Clifton and colleagues systematically reviewed these interviews and the data they generated to capitalize on the accumulated knowledge and experience of Gallup's talent-based practice.

The prominence of dimensions and items relating to motivation and to values in much of the interview research informed the design of a CSF instrument to identify those enduring human qualities. The result was an instrument that identified 34 strengths. To date, CSF has been taken by more than 2 million individuals, in 18 languages.

## Strengths Application

Clausen, and also Aldwin, Sutton, and Lachman have studied self-perceived psychological growth and change (psychological turning points) and found positive events can trigger many enduring turning points in individual lives. Identifying and understanding talents can become positive turning points, triggering changes in how people view themselves in the context of the world around them.

Numerous studies of personality, behavior genetics, intelligence, interests, and values have documented high variability across individuals. Genetic research suggests a substantial trait component in personality and intelligence constructs, among other constructs. The findings of high genetic composition may hint that how people most efficiently grow and develop is dynamically related to who they are to begin with. Other “attitudinal” constructs, such as job satisfaction, have a less strong genetic component. People can change the “changeables” (satisfaction, subjective well-being, engagement, performance, etc.), most efficiently through who they are to begin with (their inherent talents).

A development program designed to develop strengths would be mapped to the following course:

1. measure constructs most likely to be predisposed;
2. identify talents and weaknesses;
3. focus maximum learning on talents;
4. integrate activities of one’s life around talents, and manage around weaknesses; and
5. focus change on constructs that are changeable, rather than the missing traits.

In a business setting, strengths-based management uses the uniqueness of each employee to maximize the team’s output. Teams that operate this way are more engaged and, as a consequence, more productive. In a recent study, Gallup researchers have shown that an employee whose supervisor focuses on employee strengths is over two and a half times as likely to be engaged as one whose supervisor focuses on employee weaknesses. Even worse is the supervisor ignores an employee; there is virtually no chance of being engaged at all.

The strengths approach not only improves team engagement and cohesion, it also generates better performance. Gallup researchers recently completed a study that shows significant financial returns to investing in employees’ strengths development. The study included an estimated 90,000 employees in 900 business units, from 11 different organizations representing five different industries. In addition to large increases in employee engagement, teams whose managers received a strengths intervention had trailing productivity measures that were 12.5% higher than teams whose managers received no such treatment, and 8.9% higher profitability. Individual employees who learned to apply their strengths were also less

likely to terminate their employment; they turned over at a rate 14.9% lower than employees who did not learn their strengths.

SEE ALSO: ► Clifton, Donald ► Employee engagement  
► Organizational psychology ► Personality ► Person–environment fit

## Strengths (Personality)

P. Alex Linley

*Centre for Applied Positive Psychology, UK*

The label *personality strengths* was adopted from a project of the same name, which set out to identify, name, define, and assess the several hundred strengths believed to exist, but which were not represented by existing strengths groupings or classifications. The project involves the natural observation of strengths from an ethological perspective, understanding strengths and their evolution in relation to explicit theoretical underpinnings, and reviewing existing literature and empirical evidence to inform the understanding of strengths that was developed through the work of the Personality Strengths Project.

## The Evolution of the Personality Strengths Project

Personality researchers – albeit still with some dissenting voices – are now broadly agreed on the structure of personality, but it has taken many decades of research for them to arrive at this point, whether that was through systematic observation and theory development (type theory), or lexical analysis of natural language (trait theory). Being much earlier in this process, strengths researchers are still in the early days of exploring how many strengths may exist, let alone how best to classify them most appropriately. Notwithstanding this, important advances have been made with the development of the Clifton StrengthsFinder from Gallup, and the development of the VIA Inventory of Strengths, developed by Christopher Peterson and Martin Seligman. The Clifton StrengthsFinder assesses 34 themes of talent developed through occupational interviews, whereas the VIA Inventory of Strengths assesses 24 character strengths, believed to be universally valued across cultures and time.

Taken together, these two most popular strengths tools assess 58 nonoverlapping strengths. Even so, it is unlikely that they could be considered fully representative of the universe of strengths, and other researchers, including Shane Lopez and colleagues in a special positive psychology issue of *The Counseling Psychologist*, have suggested a myriad of other strengths that merit consideration. Similarly, people have reported taking strengths assessments but being left with a sense of

dissatisfaction that it had not captured themes that they considered to be integral to their performance and personality. From these perspectives, the Personality Strengths Project set out to attempt to identify, name, define, and assess the potentially several hundred (or more) strengths that are believed to exist. Recognizing this, the project's focus on identifying strengths is open-ended. Ongoing work is dedicated to exploring newly identified strengths, defining them, and developing assessment tools to measure them, with a goal of developing a comprehensive classification of strengths that is drawn from extensive observational, theoretical and empirical work, and refined through that ongoing process.

## Understanding and Defining Strengths

Extensive work has been undertaken to understand strengths more comprehensively through reviewing existing literature and empirical evidence, naturalistic observation and field interviews with strengths exemplars, and reference to theoretical perspectives that would provide a deeper understanding of the evolution of, reason for, and prevalence of strengths within human life.

On the basis of this multimethod approach, a strength was defined as “a preexisting capacity for a particular way of behaving, thinking, or feeling that is authentic and energizing to the user, and enables optimal functioning, development and performance” (Linley, *in press*).

A strength being a preexisting capacity refers to the fact that it already exists within us, to a greater or lesser extent. While it can be developed and grown, we cannot simply choose to “add in” strengths that we do not have. This is because our biological or psychological structure has predisposed us to have particular strengths, through the integrative processes of nature and nurture throughout our lives.

A strength being authentic reflects the fact that when people are using their strengths, they feel like they are being the “real me,” behaving in a way that is right for them and freely chosen by them. For example, Govindji and Linley established empirically that strengths use was significantly associated with organismic valuing: people who used their strengths more were more authentic. This authenticity is also reflected in the fact that strengths are identifiable across many different situations in the same people.

Strengths are defined as energizing because when people are using their strengths, they feel like they have more energy available to them. For example, Govindji and Linley demonstrated that strengths use was associated with higher levels of subjective vitality, the feeling of having energy available to the self. This does not mean that they can use the strength forever without ever needing to rest (physical and biological constraints still apply), but it does mean that people are able to work more effectively, and with more engagement, when they are using their strengths. This may reflect the fact that, to a degree, using strengths recharges people, in the same way that an alternator in a car recharges the battery as the car is used.

Strengths enable optimal functioning, development and performance because using strengths allows people to be at their best in terms of their psychological functioning. This is reflective of strengths as preexisting capacities (we learn best in areas where we are already strong, probably because of the strength of existing neural networks and connections), and strengths as authentic and energizing (we perform better as a result of both of these, including having better health). For example, Govindji and Linley demonstrated overall that strengths use was associated with higher levels of subjective and psychological well-being, and that these associations held when controlling for self-esteem and self-efficacy, clearly indicating the unique contribution of strengths use to optimal functioning and fulfillment.

There is one thing that is missing from this definition – and deliberately so. Strengths are often interpreted as being “positive” qualities, and the understanding of “positive” can be taken in different ways. Rendering something “positive” is, however, inherently a value judgment and no such value judgments are assumed in relation to strengths as they are defined within the Personality Strengths Project. That is, it is recognized that strengths are inherently neutral in terms of their outcomes, except that the outcomes for the individual using the strengths (energy, authenticity, optimal functioning) could almost always be considered “positive.” But the wider outcomes of the use of the strength, that is, whether the strength is used “positively” or “negatively” in any given context, is a question outside the purview of a definition of strengths. For example, both Hitler and Stalin could be considered to have had exceptional strengths. The ends to which they applied those strengths were destructive and genocidal, but that was not a function of the strengths themselves. In contrast, Mahatma Gandhi and Mother Theresa also had considerable strengths, but these were applied to more benevolent ends, even so, not being a function of the strengths themselves.

## **The Nature and Origins of Strengths**

In seeking to understand the nature and origins of strengths, the work of the Personality Strengths Project involves examining theories of evolution and human nature, in order to understand, on the basis of existing deep theory, how strengths may best be accounted for in terms of their relation to human nature, and their origins in human development, at both the individual and species-typical level.

As described by Buss in relation to evolutionary personality psychology, there are three perspectives on how human beings came into existence: evolutionary theory, creationism, and seeding (the idea that Earth was visited by aliens who started human life as we know it). Of these three perspectives, only evolutionary theory is supported by extensive theoretical and scientific evidence, and as such is able successfully to organize and explain thousands of diverse findings in a logical and coherent way.

Evolutionary personality psychology suggests that personality characteristics, as we know them today, evolved because they offered adaptive solutions to evolutionary problems – typically, problems of survival and reproduction. Building from

this basis, personality strengths theory proposes that strengths evolved similarly because they provided adaptive solutions to more specific environmental problems throughout human evolution. The greater specificity of strengths as adaptive solutions accounts for their multiplicity: Being geared to more specific problems, and with many more specific problems than general problems, it follows that there will be a multiplicity of strengths as adaptive solutions. As described by Buss (1991, p. 463): “Different problems typically select for different adaptive solutions; natural selection results in a multiplicity of specific adaptations over time. Evolutionary psychologists expect psychological mechanisms to be many and domain-specific.”

Hence, evolutionary theory can account for the development of strengths at the species-typical level. These species-typical adaptations are then pruned and shaped further by the integrative processes of nature and nurture in any given individual, with a role played both by genetic endowment and by early environmental experiences, thus accounting for the wide range of strengths, and the widely differing strengths profiles, of given individuals.

Turning to theories of fundamental human nature, three broad views were put forward by Karen Horney in *Neurosis and Human Growth: The Struggle toward Self-Realization*. First, that people are inherently sinful and destructive and hence need to be controlled. Second, that people are possessed of tendencies for both good and bad, and so the good must be supported in its battle with the bad. Third, that people are possessed of an inherently constructive directional tendency toward growth and development, and that, given the right social environmental conditions, they will grow and develop positively and constructively in the directions that are right for them. Importantly, as people pursue these constructive directions, authenticity, congruence, energy and optimal functioning will follow.

The parallels identified between the outcomes of people using strengths and the outcomes specified by this third theory of human nature suggested that this view could be used most accurately and parsimoniously to locate a theory of strengths in relation to a deep theory of human nature. As described by Aristotle, Karen Horney, and Carl Rogers, among others, people are believed to have an inherent motivation toward growth, development and fulfillment, which Rogers described as the actualizing tendency. Following the actualizing tendency enables optimal functioning, because people are pursuing the directions in life that are right for them and their fulfillment, as they are guided to by their organismic valuing process. Strengths and strengths use is considered within personality strengths theory to be reflective of this actualizing tendency at work, and is empirically supported by the work of Govindji and Linley, who found that strengths use was significantly associated with organismic valuing.

## Optimal Strengths Use

A clarion call of the strengths movement has often been taken to be – rightly or wrongly – play to your strengths and ignore your weaknesses. This led to the

counterclaims around strengths overplayed, and the idea that strengths overplayed become weaknesses themselves.

The Personality Strengths Project is explicit about the approach taken to this issue. Given that strengths are ultimately about performance (whether in work or life more generally), strengths should always be used in a way that enables optimal functioning and performance. This can mean that strengths need to be turned up or turned down, like a volume control, as described by Bob Kaplan and Rob Kaiser in *The Versatile Leader*. It always means that Aristotle's concept of the golden mean is at the heart of strengths being used optimally: doing the right thing, to the right amount, in the right way, at the right time.

Understood from this perspective of optimal strengths use, many of the criticisms and questions around strengths come into relief. Strengths can be overplayed, but that does not mean that there is no room for a focus on strengths. It does mean that one should always be mindful of and attend to the context in which strengths are being used: a strength used effectively in one context may not translate so well to another, and when the context changes, strengths deployment may need to change too; this issue is at the heart of much of the literature on why great leaders have failed.

While recognizing the desirability of focusing on strengths, the approach set out in personality strengths theory is also explicit that weaknesses too will sometimes need to be attended to – if they are performance critical. If a person excels in a particular area, but his or her performance is undermined by a weakness elsewhere in his or her repertoire, it makes sense to do what can be done to deal with this – whether that is through skill development, remedial coaching, complementary partnering, strengths-based teamworking, or even job shaping to make the weakness irrelevant.

The starting assumption of the personality strengths approach in practice is to establish whether the weakness can be made irrelevant, or whether it is inescapably central to a person's optimal performance. Given that a weakness is relevant, it can be made irrelevant by complementary partnering – working with somebody else who will compensate for the weakness in that area, or by strengths-based teamworking – working in this way across a functional or project team. Both of these approaches can be complemented by job or role shaping, whereby a person's responsibilities are redesigned so that something that once required the deployment of a weakness is moved outside of their remit.

## Applications

The personality strengths approach has been applied most broadly so far to applications with organizations, specifically as a philosophy and approach for building strengths-based organization. Strengths-based recruitment has involved mapping personality strengths to specific role outcomes, and recruiting candidates with a propensity to love to do the job, as well as being able to do the job. Strengths-based leadership development has focused on enabling leaders to identify strengths in



themselves and others, to build strong teams, to use strengths optimally, and to build an organizational climate of appreciation and celebration that creates the conditions for human flourishing and the attendant organizational benefits: A major advantage of the strengths approach is this double-win for individuals and organizations.

In another application of the personality strengths approach, Linley and Harrington set out the theoretical underpinnings of strengths coaching, describing how the central premises of the positive psychology initiative accorded with those of coaching, and demonstrating how the actualizing tendency as a central thesis of human nature was consistent with the assumptions both of many coaching approaches and the strengths approach specifically. Subsequent empirical work by Govindji and Linley demonstrated that strengths use was associated with organismic valuing (authenticity), self-esteem, self-efficacy, vitality, subjective well-being and psychological well-being, and that strengths use was a unique predictor of well-being and fulfillment, even when controlling for self-esteem and self-efficacy.

## **Future Directions**

As noted at the outset, there is much more ahead in this field than has been established to date. As such, the future directions that the field takes will be imperative in determining where it arrives and what is discovered through the process.

At the heart of the personality strengths approach will be a continued emphasis on strength-spotting, that is, the identification, definition, and assessment of new strengths through natural observation and ongoing literature reviews, together with theoretical, empirical and experimental work.

Specific empirical attention should be paid to establishing the role of strengths in areas including goal attainment, well-being, child development, educational attainment, business performance, and social contribution. Is strengths use predictive of goal attainment, and if so, how? Is strengths use predictive of well-being, and by what pathways? Do children raised with more of a focus on their strengths demonstrate enhanced developmental outcomes? Does schooling and education that is personalized around students' strengths enable improved academic attainment? Do organizations focused on employees being able to use their strengths deliver tangible business benefits? Can attention to strengths and strengths use be a means to building stronger societies on the basis of improved social contributions from all? In each case, hardening the data will be imperative, so that objective, quantifiable outcomes can be demonstrated that then underpin the case for change in, for example, parenting guidance, learning outcomes, organizational policy and culture, educational policy, and social policy.

Some of the applications of personality strengths are in the early stages of being used in relation to personal development, education and learning, health promotion, social care, and parenting and child development. Given that these applications are just beginning, future research and evaluation should be targeted

at understanding what works, and how it works, in relation to the desired outcomes of these various applications.

Overall, the explicit position of the Personality Strengths Project is that using strengths is the smallest thing we can do to make the biggest difference. Strengths and strengths use are not claimed as a panacea for all modern ills, but they do appear to have tangible benefits, for individuals, families, communities, and organizations, with a benevolence that extends well beyond the initial actions required. Future work should be relentlessly focused on the smallest thing that can be done to make the biggest difference, whether that is through strengths or through another medium yet to be established.

SEE ALSO: ► Authenticity ► Character strengths (VIA)  
 ► Strengths (Gallup) ► Strengths perspective (positive psychology)  
 ► Strengths perspective (social welfare)

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## Strengths Coaching

Dominic Carter and Nicky Page  
*Centre for Applied Positive Psychology*

Strengths coaching is concerned with facilitating the identification, use and development of strengths to enable optimal functioning, performance and development. It may be understood as an *approach* to coaching, where the focus is on achieving other goals through harnessing strengths, or it may be understood as an *outcome* of coaching, where the intention is for the coaching client to gain a better understanding of their strengths, or to develop particular strengths more fully. Most often, strengths coaching is a combination of both of these.

Strengths coaching offers an unparalleled opportunity for the application of positive psychology. After explosive growth in the last decade, the practice of coaching is now established as one of the primary means of supporting individual and organizational development. The interests of coaching and positive psychology, as the science of optimal human functioning, overlap substantially. Focus on strengths, in particular, has been a feature of positive psychology since its inception and is attracting increasing interest among coaches and coachees. Research is linking strengths use with enhanced performance and well-being

(outcomes of interest to both individuals and organizations) and strengths-focused coaching methods are being discovered (rediscovered in some cases) that seem to be effective in practice. Although scientific understanding of strengths is steadily growing, strengths coaching (like coaching more generally) has received very little attention from researchers.

Strengths can be applied to coaching in a wide variety of contexts, both within and outside organizations, and in many different ways. In some cases coaching may simply be informed by an understanding of strengths and their significance, for example, in relation to goal attainment; in others, identification and effective deployment of a coachee's strengths may be the object of coaching itself. Accordingly, strengths coaching is seen to encompass an underlying philosophy or appreciation of strengths (coaching from a strengths perspective) as well as an approach or methodology (coaching on strengths). Strengths coaching not only draws on positive psychology as a basis for practice, but also provides a potent channel for its dissemination.

## **Defining Strengths Coaching**

The International Coach Federation have defined coaching as “a professional partnership between a qualified coach and an individual or team that supports the achievement of extraordinary results, based on goals set by the individual or team” (2007). This definition is broad enough to include team coaching (optimal strengths use is an essential aspect of teamwork), but excludes a good portion of coaching which is undertaken by people who are not qualified, including line managers, teachers and parents. Strengths coaching, as most other forms of coaching, can be undertaken by anyone, albeit with different degrees of proficiency and professionalism. Sir John Whitmore's description of coaching as “unlocking a person's potential to maximize their performance” (2002, p. 8) gets closer to the essence of strengths coaching and is broad enough to encompass the various contexts in which it takes place.

As well as the contexts in which coaching takes place (e.g., business coaching, sports coaching, life coaching), different kinds of coaching are often distinguished in terms of the approach employed (e.g., cognitive behavioral coaching, psychodynamic coaching, solution-focused coaching) or the (intended) outcome (e.g., skills coaching, performance coaching, leadership coaching). Strengths coaching does not sit easily in one box or the other, being at times the outcome (e.g., where the intention is for the coachee to gain clarity on his strengths or to develop a particular strength), at times the approach (e.g., where the intended outcome is more effective leadership and a focus on optimal deployment of strengths is a means to that end) and, most often, a combination of the two.

To define strengths coaching, first it is necessary to explain what we mean by strengths. Alex Linley at the Centre for Applied Positive Psychology (CAPP) has shed new light on strengths and their significance, defining a strength as “a pre-existing

capacity for a particular way of behaving, thinking, or feeling that is authentic and energising to the user, and enables optimal functioning, development and performance” (Linley, 2008, p. 9).

In a study conducted with his colleague Reena Govindji, Linley established that strengths use is significantly associated with organismic valuing (authenticity), vitality and well-being. Using strengths enables people to be authentic because they are acting in a way that is right for them, something which is an integral part of human nature and intimately linked to our well-being and fulfillment. When people use their strengths they feel more engaged, more alive and as if they have more energy available to them. In terms of optimal development, we learn better in areas where we are already strong because these are preexisting capacities (the neural networks already exist for our strengths and it is easier for the brain to build on these pathways than it is to develop new ones). Optimal performance follows naturally from optimal functioning and development. Research involving over 19,000 employees by the Corporate Leadership Council found that focusing on performance strengths *increased* performance by 36.4%, while focusing on performance weaknesses led to a *decline* in performance of 26.8%.

In the light of this evidence, we borrow Linley’s definition of a strength to offer the definition of strengths *coaching* as facilitating the identification, use and development of strengths to enable optimal functioning, performance or development.

The same research also contributes to a shift in perspective that is fundamental to strengths coaching and at the core of positive psychology itself. Essentially, the strengths perspective is concerned with what is strong and, by association, with what is working and what is right. In this respect it is similar to the perspective of Appreciative Inquiry, which has also informed approaches to coaching. The strengths perspective is in contrast – and reaction – to the deficit model which has prevailed, not only in psychology but in many corporations too, and is characterized by the treatment of illness in one context and the improvement of weakness in the other. A fundamental assumption of the strengths perspective is that the best opportunity for growth lies in improving what is already good and making strengths stronger. Another flows from our concept of human nature and our understanding, with psychologists Karen Horney and Carl Rogers, that there is an innate developmental tendency within each of us to realize our potential, or self-actualize. A significant part of that potential lies in our strengths and its realization can be facilitated by coaching. Some of the most important and enduring benefits of coaching flow from changes in the coachee’s structure of interpretation; appreciation of the strengths perspective is one that many find affirming, motivating and empowering.

## Standing on Shoulders

Neither the strengths perspective nor strengths-focused practices are new. Three key strengths pioneers can be identified, all recently deceased, whose work on

strengths in the twentieth century has contributed significantly to the knowledge and practical effectiveness of the strengths coach today.

Management “guru” Peter Drucker (1909–2005) made his greatest contribution to the field through writing. “One cannot build on weakness,” he stated in *The Effective Executive* in 1967. “To achieve results, one has to use all the available strengths . . . These strengths are the true opportunities” (1967, p. 60). His advice to the individual on how to develop him or herself is still sound today: work on improving your strengths, put yourself where your strengths can produce results, discover where your intellectual arrogance is causing disabling ignorance, remedy your bad habits, decide what not to do, and mind your manners!

Drucker was not the first to bring the question of strengths to the attention of management science, a distinction which goes to Bernard Haldane (1911–2002), who wrote an article in the *Harvard Business Review* in 1947, providing an explanation for people’s lack of efficiency at work:

One of the reasons for this neglect and waste of manpower is that very few top-management men know and recognize the varieties and number of human aptitudes. Another is general lack of information on how these aptitudes combine to form personality and work patterns. A third reason is a failure to realize the results of misapplication or neglect of talents. (Haldane, 1947, p. 652)

The same might be argued today, in spite of advances in our understanding of “human aptitudes.” Working with military personnel in transitioning back to civilian life after the war, Haldane had already begun the development of the Dependable Strengths Articulation Process (see below), which would contribute to his recognition as a key innovator in the field of career management. Haldane’s work was pioneering and inspirational and is perhaps best characterized by his view that, because you are unique, there is something you are better at than anyone else.

The third pioneer is Donald O. Clifton (1924–2003), formally recognized by the American Psychological Association as the “grandfather of positive psychology and the father of strengths psychology.” Clifton dedicated his working life to the question of what you discover when you look at what is *right* with people. In leading development at Gallup of the Clifton StrengthsFinder assessment tool (see below) and in authoring or coauthoring several of the popular accompanying books, Clifton did more than anyone else has yet done to raise awareness of strengths and facilitate strengths use and development.

## **Strengths Identification**

### **Inventories and Surveys**

Clifton and colleagues at Gallup interviewed many thousands of professionals to discover the “themes of talent” associated with excellent performance. They

developed a model of strengths as being the combination of these innate talents with skill and knowledge, acquired through learning and practice. The Clifton StrengthsFinder tool was developed to assess the 34 most common talent themes and accompanied by books providing details of the themes and suggestions for their development. Made available through the purchase of one of these books (which include a unique access code) the Clifton StrengthsFinder has been used by over 1 million people.

A more recent strengths classification project, under the leadership of positive psychologists Christopher Peterson and Martin Seligman, has resulted in the development of another strengths identification tool, the VIA Inventory of Strengths (VIA-IS). Freely available online ([www.viastrengths.org](http://www.viastrengths.org)) the VIA-IS looks set to attract an even larger number of users. Based on a combination of literature review and consultation with subject experts, this tool measures 24 character strengths that are believed to be universally valued, across time and culture. These are grouped under Wisdom and knowledge, Courage, Humanity, Justice, Temperance, and Transcendence, virtues which are thought to derive from the exercise of the relevant character strengths. Just as the Clifton StrengthsFinder reports the five most dominant themes of talent, so the VIA-IS sets out to provide its users with their five “signature strengths.”

A third inventory, the Inspirational Leadership Tool (ILT), was developed in the UK by Caret Consulting on behalf of the state Department of Trade and Industry. The basis of this classification was a literature review, again, this time combined with a survey of 2,600 British workers. The ILT measures 18 attributes of leadership, clustered in four groups: Creating the future; Enthusing, growing, and appreciating others; Clarifying values; and Ideas to action. With its focus on leadership, the ILT is unsuitable for general use and fewer supporting resources are available than for either the Clifton StrengthsFinder or the VIA-IS. However, it is also distinguished from these other tools by the fact it reports the user's scores on the complete list of strengths. Limiting results to the top five strengths is likely to exclude some strengths (among those ranked 6–10, say) that are not currently “in play” and others of which the user is relatively unaware. Since some of our greatest opportunities for development are to be found in these areas, it is a significant limitation of the leading strengths assessment tools.

A limitation shared by all these tools is that the classifications themselves include only a limited number of strengths (34, 24 and 18 respectively), albeit the ones judged to be most significant in the terms of their creators. The research behind the Clifton StrengthsFinder itself identified several hundred “talent themes” and the Personality Strengths Project, which is concerned with identifying, defining, measuring and classifying strengths, has – at the time of writing – identified over 100 different strengths. The danger is that a tool based on a reduced number of strengths is likely to provide insufficiently precise assessments of some strengths and will miss others completely. The Dependable Strengths Articulation Process (DSAP) developed by Bernard Haldane avoids this problem. Through a systematic process of reviewing “good experiences” and how he or she made them happen,

the user is relied upon to identify their own strengths and in their own terms. As well as avoiding artificial limitation of the strengths assessed, it is argued that the results of such an assessment are more comprehensible and meaningful to the user. It might also be argued, however, that this method of assessment is itself limited, in this case by the perception, structure of interpretation and language of the user. Indeed, many coaches invite a coachee to use a strengths assessment tool as a way of introducing or reinforcing a language of strengths that many lack.

### Strengths Spotting

More often than not, assessment tools are used in coaching as a way of beginning a conversation, with equal or greater focus being placed on discussion of the results and their significance. In conversation there is the opportunity not only to engage the coachee in analysis of his or her strengths, but also for the coach to make and share their own observations about the strengths displayed. For a strengths coach in any setting, the skill of “strengths spotting” is essential. Strengths spotting involves listening for and observing the hallmarks of a strength, among which energy, appetite and a repeated pattern of successful performance are key. Based on the principles of strengths spotting, strengths coaches at the Centre for Applied Positive Psychology (CAPP) have developed a methodology called the Individual Strengths Assessment. Using a semi-structured interview, the coach works with the participant in joint construction of an appreciation of the coachee’s strengths through question-led exploration and dialogue. The advantage of this approach over the strengths assessment inventories is its sensitivity to context and to a wide array of possible strengths. Other strengths assessment approaches developed and used by CAPP include the design of bespoke strengths profiles (e.g. a framework of leadership strengths) and strengths-based 360 degree feedback.

### Self-Assessment

Whatever other methods may be used, an essential component of strengths identification in coaching is the coachee’s own assessment. When provided with a strengths assessment, the coachee’s validation of the results is essential if they are to be fully understood and internalized. In the case of strengths, there are often barriers to be overcome (see below). Self-assessment of strengths can also be used as an alternative to external assessment and usually takes the form of self-observation over a period of time. An example is provided by Marcus Buckingham in *Go Put Your Strengths to Work*. He suggests the 3-step process of: 1) capture (making a note of what you are doing when you feel powerful, confident, natural, etc., and also when you feel drained, frustrated, forced, etc); 2) clarify (in each case asking yourself where this applies, where it does not, and how far it can be generalized); and 3) confirm (testing possible strengths against a set of 12 questions which relate to what you do, the way you do it, how you feel about it and how successful you are in it). Exercises in self-observation of

strengths are an important part of the coaching process, not least because, ultimately, the coachee will be the best judge of their own strengths. Critically, also, they help to equip the coachee with the understanding and technique they need in order to go on developing their strengths when the coaching is over.

## **Enabling Optimal Use and Development of Strengths**

### **Barriers to Strengths Coaching**

Beyond a simple resistance to change, the most significant barrier to focusing on strengths in coaching is our negativity bias. The relic of a defensive mechanism we carry with us from our evolutionary past, this makes us more attuned to the negative, the problem or the deficit. There are also a number of reasons why people can find it difficult to talk about their strengths. First there is the difficulty many people have in receiving positive feedback, whether that be out of a concern for appearing (or becoming) arrogant, the fear of raised expectations or, more fundamentally, out of an inability to see or relate to the positive. Added to that is the practical obstacle that we do not yet have a well-developed language of strengths. Many strengths remain unidentified as a result. The strengths coach often needs to introduce new language before understanding of the perspective, or of a particular strength, can be achieved. In so doing, the strengths coach needs to balance the interests of clarity with the risk of alienating or disengaging the coachee, and to use the coachee's own terminology wherever possible. Finally, there is the misconception that a strengths approach must be soft, unscientific or unbusinesslike. This view is sometimes reinforced by one-dimensional depictions of strengths as a panacea, leaving some people in no doubt that the approach is unrealistic.

### **Attending to Weaknesses**

While it is true that the strengths perspective suggests that developing weaknesses will be less productive than developing strengths, strengths coaching is also concerned with weakness. First, it is hard to understand where we are strong without also understanding where we are weak. In practice, it appears that people who are clear (and feel good about) their strengths are more prepared to face up to and do something about their weaknesses. Second, coachees need to be aware of the time they spend on activities in which they are weak, where both their performance and well-being might be at risk. The third concern is the opportunity cost of spending time and energy unproductively. The approach towards weaknesses in strengths coaching is first to ask, does it matter? If the area of weakness is irrelevant in terms of what the coachee or their organization is trying to achieve, it can be ignored. Then, if it does matter, can it be made irrelevant by redesigning the role or the approach to the project? Then, if it cannot be made irrelevant, there may be a need to find a collaborator with complimentary



strengths for support or, finally, to accept that it will be necessary to invest in developing the required level of skill.

### Harnessing Strengths

It is central to the value of 1:1 coaching that support can be focused on, cognizant of and tailored to the specific circumstances of the individual. And strengths, like weaknesses, are sensitive to context. It was shown above how the coachee might be enabled (among other means) to use their *current situation* to identify and clarify strengths; having done so, they will be better able to bring their identified strengths to bear on *current challenges* and to use them as a foundation on which to build their *future*.

A key concept in enabling optimal use of strengths is the understanding that strengths can be both underplayed and overplayed, and, since this is little understood, an important objective of strengths coaching is to help the coachee see where (in the terms of Bob Kaplan and Rob Kaiser's *Versatile Leader*) they may need to turn up or turn down the volume. Alex Linley explains the idea of optimal use of strengths with reference to Aristotle's "golden mean," which is about doing the right thing, to the right amount, in the right way, at the right time.

Most often the underuse of a strength results from now knowing that we have it – it may come so naturally to us that we do not notice it, or we do not notice that others lack it. The practice of developing underused strengths, our most fertile area for development, is as simple as experimenting with using them more and in different situations. Recent research into a number of positive psychological interventions by Seligman, Steen, Park and Peterson found that using a signature strength in a new way resulted in lasting increases of happiness and decreases of depressive symptoms over a 6 month period.

Strengths can be overplayed when we are under pressure to perform, when we do not know another way of achieving a task or when we continue to use the same strength without noticing that the context has changed. The concept of the volume control (rather than an on/off switch) helps coachees to understand the workings of their strengths and realize that they are able to do something less or only in particular circumstances and thus achieve greater versatility.

Finally, the coachee can be enabled to build a future on the foundation of his strengths. If strengths are allowed to inform the process of goal-setting, which is at the center of many coaching conversations, the coachee's pursuit of those goals will benefit from the combination of capacity, motivation and well-being that flow naturally from strengths use. Also, in their achievement, the coachee will experience the fulfillment of self-actualization.

### Future Directions

Alongside basic research into the general nature of strengths and the nature of particular strengths, it is hoped that applied research in the area of strengths coaching will begin to provide an empirical base for practice in due course. The

question of the effectiveness of strengths coaching, when compared to other forms of coaching, would be of particular interest. In practice, the tools available to support the critical area of strengths assessment are not yet as effective and reliable as they need to be. Current provision of training and development in strengths coaching, although begun in one or two corners (including at the Centre for Applied Positive Psychology), appears to be insufficient to meet the likely demand, either from within or from outside the corporate sector.

Strengths coaching is not new but, perhaps in response to the needs of the age, its theoretical foundations are deepening and its practice becoming more widespread. Many coaches already hold the perspective of, and use approaches associated with, strengths coaching. Others may benefit from considering how and why the perspective of strengths coaching rubs against their existing assumptions about coaching, well-being and human or organizational development; and they will certainly benefit from adding some strengths-based approaches to their repertoire. All will be able to learn from the theoretical and practical developments which arise from the growing interest in this field.

SEE ALSO: ► Applied positive psychology ► Coaching psychology  
► Strengths-based organization ► Strengths perspective (positive psychology)

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## Strengths Perspective (Positive Psychology)

P. Alex Linley

*Centre for Applied Positive Psychology, UK*

The strengths perspective is fundamentally concerned with what is right, what is working, and what is strong. It is interested in prevention, strength, and appreciation. It stands in contrast to the deficit model, and its interest in treatment, weakness, and alleviation. The strengths perspective could be described as being interested in taking people from +3 to +8, that is, building on what is right, whereas traditional deficit models are more focused on taking people from –8 to –3, that is, ameliorating what is wrong. The strengths perspective represents the funda-

mental assumption of positive psychology at the meta-theoretical level. At the pragmatic level, positive psychology can be defined in relation to the topic areas within its remit. At the meta-theoretical level it can be defined in relation to the approach that is taken to the study of those topic areas, with reference to the nature of the research questions that are asked, and the approaches that are taken, in dealing with the topic areas of pragmatic concern. As such, the strengths perspective represents a philosophical position that defines the approach of positive psychology.

## **The Deficit Model and the Need for the Strengths Perspective**

The deficit model prevalent in traditional psychology stands as the counterpoint to the strengths perspective, and accounts for the existence and need for the strengths perspective. The deficit model, informed by the early history of clinical psychology training within psychiatric hospitals and assumptions, became the dominant model in psychology following World War II, driven by the research and intervention dollars of the Veterans Administration (founded in 1946) and the National Institutes of Mental Health (founded in 1947), both of which were focused on the amelioration and treatment of psychopathology. Given this illness focus, the illness ideology took root within psychology, and became the dominant assumption, typically unquestioned and uncritically accepted, of many psychologists.

The illness ideology equates psychological problems with biological problems, holding that they rest in the biology of the individual, rather than being influenced by a wider social context. As such, these problems require medical intervention that is best administered by suitably qualified medical experts, with this intervention typically being delivered in medical establishments. Such was the typical model that was also applied to clinical psychology throughout the second half of the twentieth century. This negativity bias, for which substantial empirical evidence has been provided, also pervaded empirical psychology throughout the second half of the twentieth century, with social and cognitive psychologists, for example, more typically focused on errors, biases, illusions and delusions – the negative poles of their areas of inquiry – rather than more positive constructs.

In this context of the deficit model, the strengths perspective was put forward as an alternative fundamental assumption for the positive psychology approach. Rather than focusing on what is broken, the strengths perspective focuses on what works, on what is improving, on what is strong and effective. It works from the counterassumption that growth can best ensue from working on what is already effective to make it even better, that the biggest improvements come from taking something that is “average” and making it “superb,” rather than taking it from “bad” to “not bad.” Understood in this way, the strengths perspective is ultimately a mindset shift, a change in philosophy and assumptions, which then subsequently leads to new ways of framing old questions, and to new questions that have not been previously considered.

## **The Origins of the Strengths Perspective**

The origins of the strengths perspective in positive psychology may be traced explicitly to Martin E. P. Seligman's presidential address in 1999 which inaugurated the field of positive psychology, but these origins are also informed by the work of Marcus Buckingham and Donald Clifton in relation to the strengths revolution. The strengths revolution described by Buckingham and Clifton was interested in shifting the focus from what is wrong with people to what is right with people, and understanding the strengths that people possess which enable them to deliver their best performances and be functioning at their most optimal level.

Almost inevitably, however, one can also trace other roots and influences of what is now recognized as the strengths perspective. In organization development, David Cooperrider's appreciative inquiry is also focused on what is working and what is best. In business, Jim Collins and Jerry Porras studied companies that could be distinguished between being good and being great. In social work, Charles Rapp and Dennis Saleebey are two of the pioneers of strengths-based social work practice. In the field of psychotherapy, Steve de Shazer's solution-focused therapy shares similar principles with a focus on the solution, rather than the problem. In community psychology, the work of Emory Cowen was typically focused on wellness and what was right with people. In the field of psychological trauma, Richard Tedeschi and Lawrence Calhoun introduced the concept of posttraumatic growth as a label for the experience of positive outcomes following trauma, in contrast to the dominant focus on posttraumatic stress disorder. In health, Aaron Antonovsky promoted the concept of salutogenesis to describe processes that contribute to healthy physical and psychological outcomes. In all cases, these approaches have challenged the predominant emphasis of the field on pathology, problem, dysfunction, and disease. The strengths perspective in positive psychology has done the same for the field of psychology, as well as providing the impetus for the establishment of new areas of focus, including positive organizational scholarship and applied positive psychology.

## **Empirical Evidence for the Strengths Perspective**

There are, to date, a handful of studies that speak to the central premise of the strengths perspective, that is, that the strong get stronger. Perhaps the earliest demonstration of this was the doctoral work of J. W. Glock during the 1950s. The Nebraska School Study Council supported a statewide research project, involving around 6,000 10th grade students, which aimed to investigate different methods of teaching rapid reading. Upon analyzing the data, it was found that the students who were the better readers at the outset had made the greatest gains in their rapid reading ability, increasing their reading rate from around 300 words per minute to approximately 2,900 words per minute. While the poor readers had improved, their gains were insignificant by comparison.

Research by the Corporate Leadership Council in 2001 with a diverse sample of 19,187 employees found that a focus on performance strengths enhanced performance by 36.4%, and a focus on personality strengths enhanced performance by 21.3%. In contrast, a focus on performance or personality weaknesses both led to declines in performance. Clearly, focusing on strengths enabled better performance, one interpretation of which is that the best got better, as with the students learning to read more rapidly.

In a study designed to assess a goal attainment support intervention with 90 psychology undergraduates, Kennon Sheldon and colleagues found, unexpectedly, that participants who were already well-integrated benefited most from an intervention to enhance their goal attainment. They interpreted this in relation to dynamical systems models. Nonlinear dynamical systems are poised for continuous evolution and shift towards ever more highly organized and effective states. Thus, they are receptive to interventions designed to change their state, and integrate these interventions toward increasing their efficiency and effectiveness.

Understood in this way, people who are already well-functioning are likely to have existing forward momentum in their lives and therefore to be in a position to transform themselves and grow even further. The same principles can be extended to an understanding of the strengths perspective in relation to the strong getting stronger: Well-functioning individuals who are working from their strengths are already successful in their lives. This success, in turn, primes them with a readiness to adapt further to ensure future success. In contrast, people who have not attained this successful state are likely to be more static, and may not have the resources to move beyond their existing circumstances.

The same parallel applies to a focus on developing weaknesses: When people are not good at something, they struggle perennially to take it to a level of mastery. Another explanation that may be applied to this issue is that architecture of neural circuitry. It is well-established that mastering a new domain involves strengthening the neural connections in the brain that underpin the affect, behavior, or cognition that is relevant to that domain. Equally, through genetic selection and early environmental experiences, people have predispositions to particular ways of thinking, feeling or behaving. Trying to change these established neural circuits (that is, strengthening a weakness) is much harder than building on existing neural circuits (that is, enhancing a strength). Overall, the evidence points to easier and more effective momentum, whether in relation to performance or to growth, when people are working from a basis of strength. This forms one of the central tenets of the strengths perspective.

## **The Strengths Perspective at the Pragmatic Level**

While recognizing the strengths perspective as a fundamental assumption and approach at the meta-theoretical level, it can also be understood and presented at

the pragmatic level, that is, in relation to the topics of interest within its remit. In this way, the strengths perspective in positive psychology has engendered a range of research in relation to strengths as individual differences within psychology, whether from the perspective of character strengths, occupational strengths, or personality strengths, or at the individual construct level through the study of human strengths including hope, optimism, creativity, empathy, gratitude, and kindness, for example. At the individual construct level, it is recognized that many of the constructs had been investigated as individual differences prior to the advent of the strengths perspective. They were not, however, investigated as constructs with reference to a wider framework and understanding of them as human strengths, and it is this wider framework and context that the strengths perspective has enabled.

Historically, the study of human strengths was effectively defined as being outside the remit of psychology by the Harvard personality psychologist, Gordon Allport, who defined *character* (within the parameters of which strengths may have been studied) as being part of ethics and philosophy, rather than personality, and so having no further place in psychology. The effect of Allport's pronouncement was that psychologists effectively ignored the research and applications of strengths in any systematic way, until, that is, the strengths perspective was put forward within positive psychology, and systematic and extensive research into human strengths was undertaken. At the individual difference level for strengths, exemplars of the strengths perspective in positive psychology include the different strengths identified and studied in the Clifton StrengthsFinder, the VIA Inventory of Strengths, and the work of the Personality Strengths Project. While each of these approaches differs in their specific understanding of strengths and as a result in the constructs they identify as strengths, all share the common heritage of being informed by the strengths perspective in positive psychology.

## Strengths and Weaknesses in Context

Taking the meta-theoretical and pragmatic levels of the strengths perspective together, a further emerging central tenet of the strengths perspective could be taken to be the advice to focus on building on strengths while ignoring weaknesses. This view has been taken by some to be the clarion call of the strengths movement, but it is a view misplaced. In practice, more practical wisdom and mature perspective is required. While it is the case that focusing on strengths leads to more positive outcomes than trying exclusively to develop weaknesses, this position should not be interpreted as an excuse for an absolute focus on strengths and an absolute ignorance of weaknesses. Such an approach simply transposes the problem of imbalance from one end of the continuum to the other. In contrast, the question of where to focus requires the application of practical wisdom to establish the right thing to do, in the right way, and at the right time.

If a weakness is identified as performance-critical, and other means of emasculating it cannot be established, then it has to be dealt with – and often through

the typical development means advocated by traditional approaches, including skills training, remedial coaching, or behavioral intervention. Similarly, the mature strengths perspective recognizes that strengths are strengths only so long as they are defined as strengths by the situation and context: honesty taken too far can become cruelty; curiosity overplayed can become nosiness.

Within the leadership literature, Bob Kaplan and Rob Kaiser have identified the need for leadership versatility, that is, the need to turn up and turn down different leadership strengths according to the demands of the situation, while being mindful that taking one strength too far likely indicates a deficit in the exercise of a strength at the corresponding pole. Their empirical research indicates that leadership effectiveness is significantly and substantially predicted by leadership versatility, thereby speaking to the need to deploy strengths appropriately as the situation demands, another example of practical wisdom in practice.

## **Current Challenges and Future Directions**

These challenges, and the need for practical wisdom to determine when, how, and to what extent strengths should be deployed, form the state of the science for the applications of the strengths perspective. Applied work in organizations is addressing these issues, and the coming years can be expected to produce significant advances as interest and applications of strengths-based organization progress. Empirically, while dislocated studies and insights exist, much work remains to systematically integrate and expand what is known about the strengths perspective in positive psychology, and the value of applications and interventions that are developed from this position. Work to date does suggest, however, that building from strengths can be one of the most significantly powerful ways in which people can be enabled to deliver their best performances at work and in life. Future investigations should bear out precisely where, how, and with whom strengths-focused interventions and applications deliver the greatest value and benefit.

SEE ALSO: ► Character strengths (VIA) ► Strengths (Gallup)  
► Strengths (personality) ► Strengths perspective (social welfare)

## **Strengths Perspective (Social Welfare)**

Dennis Saleebey  
*University of Kansas*

The essential ideas of a strengths approach to practice are these. It is far more productive, conducive to positive change and interesting for both clients and helpers to concentrate on, and marshal individual and collective resources in our work.

It brings new energy, and can lead to inventive pathways for client change. In the past we have been far too energetic in seeking out and highlighting the deficits and troubles that people bring to us. What follows is a brief introduction to elements of the strengths perspective in social welfare.

In American culture, in its many varieties, strengths-based ideas can be traced back to the ideals of democracy, the importance of diversity, the romance of the frontier, Transcendentalism, the Social Gospel, and more currently, the empowerment literature, all marching along to the unrelenting drumbeat of positive thinking. In the history of the dominant culture, strains of optimism, hope, positive expectations, the promise of tomorrow, and the possibility of remaking the self have flourished in one form or another. Evident in philosophies, religions, as well as nostrums and panaceas peddled by a variety of gurus and evangelists, today we find the shelves of libraries, bookstores and online booksellers bursting with manifestos on self-development and improvement. This is a robust remnant of a frontier mentality – paradise is just over the next rise and the self is always conditional. The profession of social work has a long tradition of interest in building on the strengths of individuals, families, and communities as part of its repertoire.

The further articulation of the strengths-based ideas in social work began at the University of Kansas School of Social Welfare in 1982 and eventually became the strengths model of case management with people with severe and persistent mental illness. In 1982, the School was awarded \$10,000 to provide case management services to those people with serious mental illness (schizophrenia, principally). Professor Charles Rapp and then doctoral student Ronna Chamberlain evaluated the standard practice of case management with this group. On the basis of their findings regarding the usual practices of case management with this population, they were convinced that with its emphasis on connecting clients only with official, institutional mental health services case management as practiced could not realize the outcomes that were most important to the people being served – living in the community, real work, constructive and enjoyable use of leisure time, and independent living. So they abandoned that conventional approach and developed another, based on the recognition and recruitment of individual and community strengths in order to achieve “normalization.” A field unit of four social work students, supervised by Chamberlain, did a trial run of the model and found that, over the course of the year, 19 of 22 indicators of positive outcome were realized. The model rapidly expanded conceptually and practically so that by the middle of the 1980s it had become the bellwether of community support services in mental health in the state of Kansas. Strengths model training spread to other states, and also broadened to work with other populations – the elderly, youth in trouble with the law, community development, parents and children in the child welfare system, and TANF (Temporary Aid to Needy Families) recipients. But it was Rapp and Chamberlain and their associates at the University of Kansas who built the conceptual, ethical, and methodological framework for the launching of the model.



In 1988, a small seminar involving scholars and practitioners from around the country who had been working with ideas and tools that seemed strengths oriented was convened at the University of Kansas School of Social Welfare. Two days of paper presentations and discussions were later fashioned into a book on the strengths perspective, *The Strengths Perspective in Social Work Practice*, now in its fourth edition.

## Philosophy and Principles of the Strengths Perspective

The strengths perspective in social work practice is based, in part, on the strengths model of case management. But it is applied, primarily, in direct clinical work with individuals and families, as well as community-building work, in mental health and other fields of practice as well. The values and philosophy of the strengths perspective clearly overlap with those of social work and other human service professions. At a minimum, these include the beliefs that: 1) all people, individually and collectively, no matter how dispirited, despised, or disorganized have the urge and the right to develop their human nature and capacities; 2) social groupings function well when their members ply their strengths and competencies toward the social good – such resources are a fundamental kind of social capital; 3) out of misfortune and tragedy may come despair and defeat, but also transformation, redemption, and release of potential; and 4) to become the people(s) that we hope to become, the discovery and employment of those resources that fortify optimal human development, and strengthen the ligaments of community are essential.

At the core of the strengths perspective are two philosophical/conceptual strains that reflect two undying elements of the human condition: oppression and liberation. *Liberation* refers to the boundless possibilities for choice, action, and belief, even in dire circumstances. Somewhere within, all humans have the urge to be heroic: to transcend difficult conditions, to develop their potential, to overcome hardship, to be recognized, and responsible. Too often this urge is suppressed or thoroughly crushed by a variety of institutional and interpersonal influences and circumstances. Imprisoned within the margins of such oppressive conditions, some still find the courage and cunning to liberate themselves, if only in spirit. *Oppression*, on the other hand, involves the considered impeding of human capacities and possibilities, and collective will. Oppression, like liberation, can be subtle or flagrant, and it often veils to the observer and to those who experience it, the reality of their strengths and resources, and their dreams of a better life. As the great pedagogue and practitioner of liberation, Paulo Freire (1995) put it: “There is no change without the dream as there is no dream without hope. (p. 91)” The dream is the “untested feasible” – a transformative idea if there ever was one.

These imperatives can be further reduced to a subset of three beliefs, each with some refining secondary tenets.

## Empowerment

There is a saying among Caucasus mountaineers: "Heroism is endurance for one moment more!" Many of the people we seek to assist have endured situations and conditions that stagger our minds and break our hearts. This is the starting point of the work of empowerment: We must discover how people have managed to survive; how they have summoned the grit to confront or simply endure their tribulations. Tapping into the energy and imagination, the will and promise of individuals is to help them recover or command the power to change, using old skills and resources and/or discovering and developing new ones. We commonly don't know fully or very well what people, individually or collectively, are capable of. Sometimes they don't either. But the budding literature on resilience, strengths, positive psychology, health realization, solution-focused and narrative approaches to practice offers some clues about how people, collectively and individually, endure and surmount adversity. Drawing from these domains as well as its own essential principles, the strengths perspective affirms that, without exception, *every individual, every family, every community, and every culture* has assets, capacities, and wisdom to be used in the making of a better life. While suffering subjugation of the body, spirit, and/or environment, people inevitably learn things, acquire competencies, unearth resources, and foster personal traits and relationships that may become the devices of, and provide energy for, change. Every human being has innate wisdom, a sense of what is right for them, a capacity for self-righting that, while they might be obscured by negative expectations, labels, regrettable decisions, bad luck, nonetheless remain important resources to be tapped. The hatch marks of divergence and difference between people, whether they are drawn by culture or class, or values and beliefs, or gender and sexual orientation should be regarded as distinctive resources for meeting the challenges of facing trials and realizing one's hopes. But, in the end, people empower themselves. That notwithstanding, the crux of much of the work that we do is connecting people and resources in the service of releasing their energy and capacity, of helping them become agents on their own behalf.

## Resources

A decade ago, Kretzmann and McKnight contended that, in approaching communities that are under siege or in economic and social distress, our usual predilection as professionals is to turn them into *clients* (clearly we do this with individuals and families as well). We should be mindful here of the distinction between service and care. Care involves a consent and commitment on the part of all parties involved. Such care is the manifestation of community. All too often service involves the importation of unfamiliar ideas and alien agendas, and making community members dependent on those in order to continue receiving assistance. Anyone working in the community must be attentive to the fact that every environment has unused, abundant natural resources and assets – individuals,

associations, institutions, families, symbols, celebrations, heroes, heritage, rituals and tools – that can be part of the emancipation from socioeconomic and political burdens. The potential of a community is a function of the combined assets and resources of each individual and family in that community. When people are working together for common and urgent intentions an energy that can transform elements of any community is created.

In terms of individuals, the possible resources and assets any individual might possess are untold. Certainly these include talents, skills, personal traits and virtues, lessons learned from experience, connections to others, spirituality, cultural meaning systems and rituals, personal and communal beliefs and values, and hopes and dreams. It is impossible to actually know the limits and parameters of a person's talents and capabilities. Neither can we convincingly gauge the boundaries of a person's potential for development and transformation.

### Possibilities

Many people who seek the help of social workers and other professionals at first seem unable to surmount the trauma and pain inflicted on them by others or by themselves. They are stuck in the past and cannot conceive a brighter future. Many of the labels we affix to them (e.g., bipolar borderline personality disorder, victim) and the approaches we take with them may aggravate that. But human beings are always in the making and full of possibilities even though this may be hidden by despair and anguish. In helping individuals, families, and communities rekindle the spark provided by their hopes and dreams, existing desires and needs should be taken seriously, elaborated as vividly and vigorously as possible. Steps toward the dream should be made explicit and the taking of them conceived as a collaborative project between the social worker and the individual or family. One often finds hope expressed in the vocabularies of promise, possibilities, and positive expectations. These become the conceptual basis for drawing blueprints for the future.

These principles and their correlates provide a way of thinking about those we help, their day-to-day lives, and the contexts in which they work, love, and play. Working from a strengths perspective does require something of a different lens and language for looking at, and naming the worlds where we do our work. A strengths approach to practice, persuades us and our clients to, in Emily Dickinson's felicitous phrase, "dwell in possibility" (1960, p. 327), to be hopeful, and to believe in the individual, family, or community – even or especially when they do not believe in themselves.

By way of summary, imagine an equilateral triangle. The left angle is fronted by the letter *C*; the angle to the right by the letter *R*. The apex of the triangle is topped with the letter *P*—*CPR*, as it were. *C* represents capacities, competencies, courage, and character. *R* symbolizes resources, resilience, relationships, resolve, and reserves. *P* stands for promise, positive expectations, potential, purpose, and possibility. This imaginary graphic signifies the dynamic core of a strengths-based

approach to practice. All three “angles” must be a part of any kind of healing or helping. The calculating of all three dimensions and how they are played out in the contexts of people’s lives becomes the essence of an assessment of strengths and assets. In the original sense of CPR, we breathe for someone until they can breathe for themselves. In this CPR, we believe in someone until they can believe in themselves.

## **Core Conditions of Change**

In a survey of the research carried out into psychotherapy over the last couple of decades, Ted Asay and Michael Lambert concluded that, when it works, psychotherapy is driven by four common factors that reach across schools of thought, theories of psychotherapy, and clinical practice of all kinds. We can take them even further to provide some conceptual ballast for a strengths-based approach to helping.

### **The Environment: Strengths, Resources, and Contingencies**

The matrix of clients’ daily lives includes their capacities, interests, beliefs, and skills. Likewise, the socioeconomic, political, and cultural resources in the environment can make potent contributions to a change for the better. This web of resources in individuals’ surroundings, such as social support networks, as well as their own assets and knowledge has a great deal to do with quality of day-to-day life. It is also true and usually overlooked, that the play of contingencies (luck) in people’s lives can be a significant source of change and challenge. In the end, the interaction of these factors may matter more than the ministrations of professional helpers. Asay and Lambert claim that in their review of the research these factors accounted for 40% of the positive change. The strengths perspective encourages professionals to capitalize on these resources in a deliberate and responsive way.

### **The Caring Relationship**

It has been a shibboleth of sorts in the social work profession that the medium of change is ultimately the helping relationship. Over half a century ago, Carl Rogers and his associates defined the core conditions of change as the vital elements of therapeutic relationships – caring, empathy, respect, unconditional positive regard, and genuineness. The palpable presence of these assured that a therapeutic alliance would develop between the helper and the helped. In his research and a review of others’ research over the past 30 years or so, Hans Strupp claims that the quality of the helping relationship is the root factor underlying positive change. Practitioners of the strengths perspective add to these conditions the importance of collaboration – developing a mutually crafted project to work on,

the cooperative laying out of a concrete path to dreams and hopes. Charles Rapp and Rick Goscha, drawing from the work of Deegan state that, "The relationship between service provider and participant is based on compassion, understanding, and knowing each other as unique individuals" (2006, p. 32). They further define the effective helping relationship in a strengths approach as purposeful, reciprocal, friendly, conversational, mirroring, trusting, and spirit-inducing (as opposed to spirit-breaking) as well as reflecting the core conditions – empathy, genuineness, and unconditional positive regard. Asay and Lambert posited, in their review of outcome research, that the relationship accounted for about 30% of the positive change in clients' lives.

### Positive Expectations, Hope and the Placebo Effect

Of great interest to those who subscribe to a strengths-based orientation is the influence of positive expectations, hope, and the placebo effect. Consider the following: Michael Fisher reported recently that in the 1950s at the University of Kansas Medical Center, in order to test a new medical procedure for the treatment of angina, surgeons performed real operations on one group of patients with angina, and a "placebo operation" on the other group of men with angina. The placebo group was told that they were going to have heart surgery; they were given a general anesthetic, and incisions were made in the chests. But no operation was done, the surgeons just messed around a little bit and the patients had the sutures and pain to indicate that they actually had surgery (the ethics of this seems, on the face of it, distressing but in 2005 Groopman reported that over the years there have been several sham surgery studies). Of the people who had the real surgery, 70% reported long-term improvement in their angina, but *all* of the placebo group did. It is not at all uncommon, in tests of psychoactive drugs, for the placebo groups to show anywhere from 25% to 60% improvement. The extent that the real drug is better than the placebo is thought to be the extent that the drug is effective. But we cannot say, for instance, just how much of the effect of the real drug is also a placebo phenomenon. The most thorough and statistically adroit study in this area was undertaken by physicians who, using the Freedom of Information Act, were able to get results of clinical trials over the last 15 years reported by drug companies to the Food and Drug Administration for the six most popular antidepressants (Selective Serotonin Reuptake Inhibitors; SSRI). Up until then no-one had access to the results of these trials so we have had to take the drug companies' word about their efficacy. Here, Kirsch and his fellow researchers conducted several meta-analyses of these data and, no matter how generous or conservative their analysis, they found *no clinically significant differences* between the drugs and the placebos. "Whatever else this means it does, I think, bespeak the power of hope, possibility, positive expectations, and the belief in the healing power of the ministration" (Saleebey, 2006). Expectancy and the placebo effect account for 15% of desirable change according to Asay and Lambert. It would not be surprising if the effect were somewhat larger than that.

We can suggest, then, that the power of positive expectations, belief in the possibilities inherent in the individual, family, or community, and the mysterious placebo effect are truly important to the process of change. These inhere in the strengths perspective. Pat Deegan, who in spite of (and in some instances because of) the many vulnerabilities in her life triumphed over them in pursuit of her dreams (she became a professional psychologist, for example) says this:

The Strengths Model . . . represents a powerful antidote to the high cost of the deficits approach. In this model, strength is not constructed as some superheroic state of invulnerability. Rather, we learn that even when people present with obvious vulnerabilities, they also have strengths. Their strengths are in their passions, in their skills, in their interests, in their relationships, and in their environments. (2006, p. viii)

Contrast the pictures that the strengths perspective paints with those drawn in 2000 by the authors of the *Diagnostic and Statistical Manual* (DSM-IV-TR) of the American Psychiatric Association. Although each carries heavy symbolic and linguistic freight, creating expectations and, over time, suffusing into identities of those so portrayed, the diagnostic gallery of the DSM, unleavened by the acknowledgment of positive attributes, constitutes a kind of rhetorical and symbolic whammy, a canvas of dreadful, and ominous portraits.

Related to the power of the placebo is the *plasticity of the brain*. Once thought to be as virtual monolith after adolescence, it is now known that the brain is changing constantly. It is something of a miracle that this organ, as Richard Restak observes, “never loses the power to transform itself on the basis of experience and the transformation can occur over short intervals. . . . your brain is different today than it was yesterday.” (2003, p. 8) As neuroscientists know, most of these changes take place at the synapse (the space through which neurons chemically “communicate” with each other) and are the result of experience and learning or simply one’s current state of mind (emotions, for example, have a profound ability to change the brain, both in the moment and, occasionally, permanently). Therefore, we have a stunning capacity to alter, extend, and reshape our behavior, feeling, motivation, and cognition. This is why talk therapies can be successful because, at one level, when we interact with each other, we are talking to our brains. As we do so, we effect minute changes in the brain’s (and, thus, the mind’s) landscape. And as we do that, we may be party to changes in the way people perceive and act in their environments. This is also why, individually and collectively, our brains will be different tomorrow than today because they undergo these relentless minute alterations daily.

### The Technical Operations of the Theory or Perspective

These contribute about as much to “therapeutic” gain as do positive expectations and hope. They do make a difference, of course, but not as much as we might think. It is clear, for example, that interpersonal therapy and cognitive-behavior

therapy are generally effective treatments for moderately severe depression. It is also likely that without the presence of the above factors, they would be less potent.

## Conclusion

It should be said here that the strengths perspective is not about ignoring the real adversity and ordeals that people must confront. Cancer, abuse, abandonment, war, interpersonal violence, for example, are on the daily menu for far too many people. The strengths approach, at the least, is about restoring balance to the way that we regard people contending with such tribulations and the way that we think about work that we do – “a balance that requires that we appreciate the struggles of an individual, family, or community but more importantly that we look at those struggles for hints and intimations, or solid evidence of strengths, capacities, and competencies” (Saleebey, 2006, p. 22).

Duncan and Miller (2000, p. 216) put it well:

If therapists are to resist the pull to steer clients automatically toward diagnosis and medication, the belief in client capacity to conquer even extreme (and often dangerous) personal circumstances must go deep. Clients can use an ally in overcoming often dramatic obstacles to personal recovery. When professionals use their inevitable positions of power to hand power back to the clients rather than block client capacities, clients can even more readily reach their goals.

On a much broader canvas, the historian Howard Zinn (1999, p. 648) paints this picture:

To recall this [the many rebellions of the masses over the centuries] is to remind people of what the Establishment would like them to forget – the enormous capacity of apparently helpless people to resist, of apparently contented people to demand change. To uncover such history is to find a powerful human impulse to assert one’s humanity. It is to hold, even in times of pessimism, the possibility of surprise.

Here’s to that possibility.

SEE ALSO: ► Character strengths (VIA) ► Strengths (Gallup)  
► Strengths (personality) ► Strengths coaching ► Strengths perspective (positive psychology)

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## Strengths-Based Organization

Nicky Page and Dominic Carter

*Centre for Applied Positive Psychology, UK*

*Strengths-based organization* is a term used to describe both the process and the outcome of harnessing individual strengths for joint performance in organizations.

As Peter Drucker maintained:

To make strength productive is the unique purpose of organization. It cannot, of course, overcome the weaknesses with which each of us is abundantly endowed. But it can make them irrelevant. Its task is to use the strength of each man as a building block for joint performance. (Drucker, 1967, p. 60)

Peter Drucker, Bernard Haldane, Donald Clifton, Marcus Buckingham, and Alex Linley have all offered significant insights into the theory and practice of strengths-based organization.

Recently Buckingham argued that it is not *people* that are an organization's greatest assets, but people's *strengths*. Among the organizations that have reached the same conclusion and are acting on it are the corporate members of the Centre for Applied Positive Psychology (CAPP). CAPP characterizes a strengths-based organization as an entity in which: *individuals* know their strengths, actively seeking to use and develop them; *managers* know the strengths of their people, also actively seeking to use and develop them; and the *organization* is equipped with the tools, processes and expertise required to support this.

There is growing evidence that significant organizational benefits accrue from this approach to cooperation and management. They include: tapping into unused talent, attracting and retaining the best people, improved individual performance, enhanced employee engagement, increased flexibility, enhanced working relations, and stronger teams. For example, a survey of over 19,000 employees by the Corporate Leadership Council in 2002 found that when manager feedback emphasized performance strengths, individual performance *improved* on average by 36.4%, whereas an emphasis on performance weaknesses had a negative impact on performance, with average *declines* in performance of –26.8%. The personal benefits associated with knowing and using one's strengths, including increased levels of happiness



and well-being, combine with the organizational benefits to offer the possibility of a powerful double-win.

Despite this, few organizations have succeeded in implementing strengths-based practices throughout their whole corporate structure. Among the main challenges faced by those that try are: the absence or inconsistency of language around strengths; inexperience among employees and managers in identifying and harnessing strengths; and people management and development systems that have been designed principally to identify and eradicate weakness.

Organizations can begin to overcome these challenges by: “seeding” a consistent language of strengths; equipping managers and individuals to realize strengths; and embedding strengths-based approaches in their human resource management (HRM) strategies and systems.

A consistent language for strengths is essential to achieve a common understanding across the organization of what strengths are. CAPP’s definition of a *strength* is “a pre-existing capacity for a particular way of behaving, thinking, or feeling that is authentic and energizing to the user, and enables optimal functioning, development and performance” (Linley, 2008). An organization’s understanding of, and language for, strengths, can be developed simultaneously, through presentations, training, coaching and sharing written resources.

Equipping managers and individuals to identify and develop strengths starts with the activity of recognizing when strengths are being displayed, or “strengths spotting.” Strengths spotting involves listening for and observing (usually over a period time) the hallmarks of a strength. Among these, energy, appetite and a repeated pattern of successful performance are key. Managers who successfully spot strengths are able to develop unique insights into what truly engages their employees. This practice is essential to the development of a strengths-oriented organizational culture and the information it provides is vital for optimal task allocation and employee development.

Developing people strategies and systems which help to embed strengths often starts with the reevaluation of current practices and procedures, and follows with the adaptation of these strategies and systems to support the identification of strengths in existing or potential employees, together with their effective deployment. Examples of organizations which have undertaken this realignment of HRM processes include Norwich Union, which has successfully introduced strengths-based recruitment, Standard Chartered Bank which has deployed a strengths-based approach to its people management, and BAE Systems, which has placed strengths at the heart of board-level leadership development in one of its major business units. In each case, the organizations associate their strengths-based initiatives with tangible business benefits.

Increasingly, organizations are coming round to the view that Drucker expressed over 30 years ago: that their best opportunity for competitive advantage lies in harnessing their employees’ strengths. Although the field of strengths-based organization is emergent, it is already proving to deliver its promise of both individual and organizational benefits and performance results.

SEE ALSO: ► Applied positive psychology ► Organizational psychology  
► Positive organizational behavior ► Positive organizational scholarship  
► Strengths coaching

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## Successful Aging

Gail M. Williamson and Juliette Christie  
*The University of Georgia*

Aging successfully, remaining vital and actively engaged with life, is quite possible, and gerontological science focuses on finding ways to help our aging population live well in the years ahead.

## History of Aging Research and Outlook for the Future

Historically, attitudes about aging have been fraught with mythical thinking, a short-sightedness we are just beginning to overcome. Traditionally, old people have been viewed as sick, cognitively inept, isolated, a financial drain on society, and depressed by their circumstances. These attitudes and the projected increase in elderly people within the next few years have seduced scholars, commentators, and policy-makers into the doomsday philosophy that our society is about to be overwhelmed by people who are disabled, requiring constant care, and not making worthwhile contributions. With fewer children per capita than previous generations, a major concern is that as the Baby Boomers age into disability, there will be fewer adult children available to provide care, creating a demand for formal (e.g., nursing home) care that may severely (if not, impossibly) tax societal resources.

Of course, as with any substantial demographic shift, there are concerns to be addressed. With these challenges, however, come opportunities, and we summarize evidence indicating that there are offsetting parallel, positive arguments to these catastrophic predictions. Many solutions revolve around actions that should be and, in some cases, already are being taken at governmental and societal levels. Fortunately, aging individuals and their immediate social networks can solve many problems without resorting to public assistance. The solution lies in changes in behavior that will enable older adults to continue to engage in valued

normal activities with each advancing year. First, however, we need to take a realistic look at today's elders and what future generations can expect as they age.

### Are Old People Sick People?

An important truth is that most adults over age 65 are remarkably healthy. Rates of disability, even among the very old (i.e., those over age 95) as well as the percentage (and absolute numbers) of nursing home residents have been steadily declining since 1982. Along with increasingly widespread public knowledge and acceptance of the behavioral aspects of chronic illness, advances in medical technology forecast an even rosier old age for Baby Boomers and subsequent generations. In addition, older adults are quite skilled in making gradual life-style changes to accommodate diminishing physical abilities. Also, nature is remarkably forgiving. In other words, it is never too late to begin a healthful lifestyle.

### Are Old People Cognitively Deficient?

Cognitive abilities naturally slow down with increasing age. Luckily, however, the “use it or lose it” adage about sexual functioning also applies to learning and memory abilities. Short of organic disorders (e.g., Alzheimer's disease), older adults in cognitively challenging environments show minimal, if any, declines in thinking and learning abilities. Like any other age group, when elderly people are less mentally challenged, their cognitive performance declines. Older adults typically encounter mental challenges less frequently than the college students to whom they usually are compared, but they can learn new things – and learn them quite well. Moreover, whether people *believe* they can learn and remember is crucial. The lesson here is that aging adults bear some responsibility for making sure that they engage in cognitively challenging activities.

Using current and emerging technologies can improve cognitive capacities of seniors. The first step may involve no more than learning to use an automated teller machine, but that effort can promote subsequent skills. “Neurobic exercises” both preserve and improve brain and memory functions. Routine activities that require little cognitive effort can exacerbate cognitive decline. Accordingly, researchers recommend actively seeking new and enjoyable experiences – simply because they are different.

### Are Old People Isolated and Lonely?

Recent evidence does not support the stereotypical view that older individuals deplete the resources of an ever-diminishing support system. Rather, social networks remain remarkably stable in size throughout the lifespan, with the number of close relationships among noninstitutionalized older adults equaling those of younger people. Network losses do occur over the lifespan through death,

relocation, and retirement, but even among very old people, new social relationships are formed to replace lost ones.

Aging Baby Boomers will have even wider social networks than previous generations. With their computer competencies, they will routinely use email to maintain contact with family members and friends. We already have evidence that they are more likely than their younger counterparts to access Internet information and support from a wide spectrum of people who share their needs and concerns.

### Do Old People Drain Society's Resources?

The benefits elders receive have been scrutinized as potentially wasted and taking away from "more needy" groups and the overall economic well-being. However, the evidence is contrary to this view. Older adults vary as widely as their younger counterparts in health, financial security, and willingness to accept public support. More important, senior citizen benefits depend on social status and past work experience, favoring high income earners with a continuous work history, i.e., white middle-class men. The truth is that, without Social Security, the percentage of people over age 65 who live in governmentally-defined poverty would increase from 12% to 50%. Thus, cuts in Social Security would hit hardest those who need them most.

Older adults do not drain societal resources. Future elders will be more educated than their predecessors and, with their higher earnings, will continue to save after retirement rather than "spend down" their assets. Even those who do not continue to work for pay make substantial contributions. "Paid" work tends to be overvalued in our society, but unpaid (e.g., in the home, volunteer efforts) and underpaid (e.g., working in fast-food restaurants and bagging groceries) activities contribute a great deal to the social enterprise. When given the opportunity, large numbers of seniors eagerly do volunteer work and take on low-paying part-time jobs. But, the most telling, and least appreciated, example of the financial contributions of older adults is the economic value of the care they provide to disabled family members, estimated in 1999 to be between \$45 and \$200 billion annually. Put simply, older adults contribute a great deal to society – whether or not they collect a paycheck.

Should they choose to continue to work for pay, Baby Boomers and subsequent generations will be more advantaged than previous generations. Attitudes about older workers are changing, and the attitudes of older workers themselves are changing. Because of post-Baby Boom declines in birth rates, as the Baby Boomers age, the number of employable adults will decrease relative to the number of new jobs. Following the law of supply and demand, older workers will be more valued and sought-after. Moreover, younger retirees and Baby Boomers are looking at retirement as both a lifestyle transition and a new opportunity. Nearly 70% of Boomers expect to continue working after retirement, and those who do not feel ready to retire will not be compelled to do so.

The traditional retirement age of 65 has lost much of its significance. In terms of health and life-expectancy, age 70 today is roughly the equivalent of age 65 in the 1930s when Social Security was established. Indeed, changing health status and attitudes have led to age 65 no longer being considered “old.” Although most individuals who have adequate financial resources will retire at the usual time or earlier, they will be able to choose to continue working either because they want to or feel the need to supplement their retirement benefits.

The point to be made here revolves around personal choice. We have known for a long time that people who feel in control and who can make choices about the important aspects of their lives are both physically and psychologically healthier than those who perceive that they lack personal control.

### Are Old People Depressed?

In certain segments of the population, clinically relevant depressive syndromes, including major and minor depression, may affect 13–15% of older adults. And, while empirical findings do indicate higher rates of “depression” among disabled older adults, the same is true in younger adults with disabilities. The truth is that, overall, clinical depression is no more, and probably is *less*, prevalent in older than younger adults. Indeed, there is evidence that elders cope more effectively with stressful life events than do younger adults. Over the life course, through life experiences and successfully coping with various stressors, the typical adult builds adaptive attitudes that generalize to coping with new stressors. A key component is personal control. Regardless of age, people are motivated to exercise control over the important aspects of their lives. Solving the problems that go along with getting older (e.g., death of a spouse) simply may not be possible. Consequently, those who adapt well will shift their focus from actively trying to change the situation to managing stress-related emotional reactions by, for example, accepting the situation and continuing to function as normally as possible. By doing so, they will maintain a sense of control.

### Activity Restriction and Depressed Affect

Exemplifying the impact of loss of control, *activity restriction* has been operationalized as the inability to continue normal, valued activities (e.g., self-care, care of others, doing household chores, going shopping, visiting friends) that often follows stressful life events such as debilitating illness. Indeed, it appears that major life stressors lead to poorer mental health outcomes *because* they disrupt normal, valued activities.

Numerous factors, other than physical disability, contribute to activity restriction. For example, older adults tolerate pain better than do younger adults, a phenomenon most commonly attributed to the increased exposure to pain and disabling conditions that older people experience. Indeed, experience, rather than

age, matters more in terms of predicting those who will restrict their activities in the wake of stressful events. In other words, old age need not foster either activity restriction or depression. Another potentially important contributor to coping with stress is financial resources. Inadequate income interferes with normal activities. Moreover, if financial resources are merely *perceived* as being less than adequate, activities are more restricted. Thus, when life becomes stressful, a first line of defense may be to cut back on normal activities that involve spending money, e.g., shopping, recreation, and hobbies. Personality also contributes to activity restriction. Some people cope in maladaptive ways across all situations throughout their lives. In contrast, there are those who routinely face the situation, rationally evaluate possible solutions, seek help and information as appropriate and, if all else fails, accept that the problem has occurred, deal with their emotional reactions, and make every effort to resume life as usual.

Another important factor is social support. People with stronger social support resources cope better with all types of stressful life events, and routine activities are facilitated by social support. Comparable benefits are seen in people who merely *perceive* that social support is available if it is needed, and the benefits of perceiving that one has supportive others remain after controlling for demographics (e.g., age, financial resources), illness severity, and personality variables. Social support, however, appears to be a function of personality variables that, in turn, influence activity restriction. Those with more socially desirable characteristics also have more supportive social ties and, therefore, may be less subject to activity restriction.

## Summary of Current Research Findings

The forecast for our aging population is that, more than ever before, older adults will be physically, cognitively, psychologically, and socially healthy. Still, significant numbers of elders will be disabled, socially isolated, and depressed. Often people become depressed by stressful life events largely because of disruptions in their ability to go about life as usual, and illness severity, younger age (or lack of experience), inadequate income, less social support, and personality variables also play a role.

In their acclaimed book, *Successful Aging*, Rowe and Kahn proposed that there are three components of successful aging: 1) avoiding disease; 2) engagement with life; and 3) maintaining high cognitive and physical function. Other factors (e.g., personality, financial resources) also influence how well one ages.

Avoiding disease is largely a function of routine activities. Temperance in detrimental behavior (e.g., smoking) is related to better physical health, less disability, and greater longevity. People need to engage in personally meaningful activities (whether intellectual, physical, or social). Maintaining high cognitive and physical functioning is a key to aging successfully. When confronted with seemingly overwhelming life events, the telling factor may well be the extent to which at least a semblance of normal activities can continue.

## **Interventions to Increase Activity and Decrease Depression**

Coping with the stresses of getting older is a complex, multifaceted process that is influenced by numerous factors. With age, physical and psychological stressors often become less controllable. Successful interventions may require helping elders shift from problem-focused to emotion-focused coping mechanisms. By acknowledging that psychological well-being is a function of restricted normal activities, we can design interventions to reduce both activity restriction and depression. Efforts to increase activity should focus on identifying manageable activities and available resources. Programs can be implemented to engage aging adults in pastimes that not only meet their specific interests and needs but also fit their functional capacities.

Beyond evaluating demographic characteristics such as age and financial resources, a second line of intervention involves assessing stable traits that predispose people to restrict their normal activities. For instance, people low in optimism do not cope effectively or adjust well to stress. They also have less supportive social ties, increasing their vulnerability to activity restriction. High levels of neuroticism are related to a maladaptive coping style that may include foregoing pleasurable activities. When faced with disrupting life events, individuals who are less agentically oriented and do not have a strong sense of mastery will have more difficulty finding ways to continue their rewarding activities. In addition, those who are low in the dispositional predilection to hope for positive outcomes are less likely to conceptualize ways to continue (or replace) valued activities or to persist in their efforts to do so, particularly when pathways to achieving these goals are blocked. Once individuals predisposed to restrict activities have been identified, a particularly fruitful line of intervention may be an adaptation of hope therapy.

Social support, like personality and experience, interacts with health-related variables to affect normal activities. With more supportive social support networks, activity restriction is less likely. Thus, identifying community-residing older adults with deficits in social support is another important avenue for intervention. Deficits in social support can range from instrumental (e.g., grocery shopping) to emotional (e.g., coping with life changes) support. Available resources often are underutilized because family and friends are not aware of the elder's needs. Thus, a prime point of intervention is to identify tapable resources and facilitate social network cooperation.

## **Directions for Future Research**

Models of stress and coping typically imply that the causal path is unidirectional – e.g., that stress causes activity restriction that, in turn, causes negative affect.

However, as clinicians have long known, being depressed causes people to forego many of their previously enjoyed activities. In fact, one of the better behavioral treatments for depression is to motivate patients to become more socially and physically active. Controlled experimental studies are needed to clarify previous results by demonstrating that strategies designed to increase activity level will, in fact, improve well-being. In addition, identifying differences between people who will tolerate discomfort in order to continue engaging in meaningful activities and those who will not voluntarily make such efforts under similar levels of discomfort will bring us closer to successful intervention programs.

SEE ALSO: ► Locus of control ► Personality ► Social support  
► Wisdom

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## Suffering

Sherlyn Jimenez

*University of Connecticut*

Suffering, or to bear or be weighed down, is a universal human experience, central to the human condition, and in all likelihood, the primary reason why people seek psychological treatment. Historically, suffering has taken on various meanings and significance, and presently, fields from medicine to theology have conceptualized and defined suffering in several ways. Nonetheless, there seems to be a general agreement that suffering is a phenomenological experience involving not only physical, mental, and emotional pain but also existential and spiritual pain. In psychology, however, the meaning of suffering has been fundamentally altered. The language of mental pain and suffering has been primarily replaced by a vocabulary of illnesses and disorders with suffering reduced to diagnoses made from symptoms and criteria. Not surprisingly, given the phenomenological nature of suffering, psychology has largely been silent on the construct of suffering with discussion about suffering relegated to areas of pastoral psychology and occasionally, humanistic and psychoanalytic literature. Outside psychology, research on suffering has mostly been confined to the nursing and medical sciences, generally in the context of pain and palliative care, and mainly of a qualitative nature.



## Historical Overview

Suffering has held various meanings over culture and time. The Stoics in Greece believed that suffering is at the core of life, and counseled detachment. In the Judeo-Christian and Western tradition, suffering is seen as something to be endured, a learning experience that provides the path for redemption. It is seen as an inescapable part of human experience valued as a way to go beyond one's self and achieve grace and salvation. The message that is reinforced within these traditions is that transcendence over suffering is possible and attainable and that pain has a positive and motivating purpose. During the Enlightenment, the possibility that suffering could and should be eradicated and that humanity can be liberated from suffering began to prevail. However, Kierkegaard and Nietzsche believed that suffering was intrinsic to the human experience and held it as a prerequisite of human achievement – that is, it challenged individuals to cultivate previously undiscovered strengths within them. Sartre and Camus held that it is our existential responsibility to accept the inevitability of suffering and the absurdities of life. However, they believed, along with existential psychologists such as Frankl, that suffering may also offer opportunities for growth, and that by finding meaning in threatening events, suffering can be transcended. Freud proposed three sources of painful experience and suffering: physical pain, the external world and our relationship with others. In Freud's view, interpersonal relationships constituted the greatest source of our suffering – the bedrock of what it means to be human.

Levinas concurred with the significance of interpersonal relationships, proposing that the primary encounter we have as humans is between our being and the being of the other. However, Levinas offered a different perspective on suffering, which he perceived as offering us a unique opportunity for surmounting the isolation that we all experience. According to Levinas, our encounter with the suffering of another allows us to rise above our own self-concern to a sense of caring and responsibility. It is this recognition of our shared suffering, our connection to the suffering of others, which provides meaning for our own suffering. In this sense of interconnectedness brought about by suffering, *compassion* and the desire to alleviate suffering may arise – provided that our own suffering is experienced in full, not avoided or denied. In Levinas' view, only if one allows oneself to fully experience suffering can one be changed or transformed by it.

## Buddhist View on Suffering

While Western tradition sees suffering as a negative which is transformed into positive once it is transcended and ascribed meaning, the Buddhist/Eastern tradition views *dukkha*, translated as suffering or unease, as a general fact of existence in which individuals themselves must take ultimate responsibility for their suffering. In Buddhism, the origins of *dukkha* are aversion, attachment, and delusion.

That is, suffering is caused by pain (e.g., physical, emotional and mental pain); by impermanence and change (e.g., violated expectations and loss); and by unstable and unreliable conditions (e.g., uncertainty and attachment to our mental constructs or habitual ways of thinking, feeling and acting). The fourth noble truth in Buddhism states that the path to the relief from suffering involves training and transformation of the consciousness through wisdom, conduct and meditation. Accordingly, the purpose of living is to benefit others and to avoid giving harm such that ultimately, the wish to end suffering becomes rooted in the feeling of *compassion* for both oneself and of others.

## Recent Conceptualizations of Suffering

Recently, more concrete definitions of suffering have been proposed. In the health sciences, Cassell has defined suffering as a state of extreme distress or impairment associated with events that threaten the integrity of a person. Cassell's definition emphasized the role of prior experience and expectancies along with the assessment of the seriousness of the perceived or anticipated threat. For Cassell, it is the impact – the meaning or significance and value attributed to the experience – that is the essential fact, not the severity. Moreover, suffering is ultimately a personal and private matter, a phenomenological event that nonetheless has a social dimension in that it may lead to isolation. For Van Hooft, however, suffering is not necessarily a phenomenological experience. To him, people who are experiencing health-threatening conditions such as poverty are suffering even if they may not be aware of it or may not consider the adverse conditions to be a threat to their integrity. Van Hooft conceives suffering as the derailment or frustration of goals; specifically, not being able to attain and fulfill biological needs, appetitive (desires and relationships), deliberative (self-efficacy) or contemplative (sense of meaning) goals. In this way, pain is simply one form of suffering (e.g., biological). Edwards adds that suffering must be of significant duration and must have a fairly central place in the mental life of the subject but that suffering does not necessarily include a threat to the intactness of the self.

In the theology and palliative care literature, Dame Cicely Saunders defined total pain or suffering as including psychological, spiritual and interpersonal aspects along with its physical aspects. Suffering is differentiated from pain in medical terms in that pain is often associated with objective symptoms and sensations while suffering is defined as a behavioral and emotional response. Previously, Williams had defined suffering as an anguish experienced as a pressure to change and as a threat to our integrity and the fulfillment of our intentions. Millsbaugh has equated suffering with spiritual pain which affects the person's body, mind and spirit, and is triggered by either our interpretation of an experience or our inability to interpret an experience. Thus, it is the spiritual and existential dimension of our existence and not only the bodily aspects of ourselves that is implicated in suffering. A crisis of meaning ensues when we come to the realization and awareness of the

essential and existential facts of life: that life is fragile, that we are not in control, that we are ultimately alone and that therefore, our lives no longer have purpose. Millspaugh suggests that spiritual pain is mitigated when a person discovers a transcendent sense of purpose and sense of control, when life is once again invested with meaning. Suffering takes on redemptive qualities and may lead to spiritual growth once the necessity of suffering is accepted and meaning is found.

Social scientists take issue with the portrayal of suffering as a response to a discrete event that happens to individuals without context. Kleinman and colleagues proposed the concept of social suffering, that suffering is a social experience shaped by political, economic and institutional forces which may simultaneously create and/or exacerbate suffering and influence responses to it. Thus, suffering is a social process that is simultaneously a matter of health, politics and culture, extending beyond simply an emotional response triggered by pain and distress. This consideration of suffering reveals the moral dimension of suffering and critiques the treatment of pain and suffering which prevents it from being contextualized through a multitude of factors. The point Kleinman makes is that suffering is not only situated in the body but linked to the social world as well as to the invisible world of spirit in an interconnected web.

Thus, social scientists would be critical of the reductive nature of psychological diagnoses, of which posttraumatic stress disorder (PTSD) provides the closest equivalent to suffering. Their critique of psychology is that mental health disorders such as PTSD are addressed without context and the problem is shifted to what is wrong with the patient rather than what is wrong with what happened to the patient. According to the DSM-IV-TR criteria, PTSD involves a threat to the physical integrity of self or others resulting in intense fear, helplessness, or horror and includes the following psychological and physical symptoms: intrusions or reexperiencing; hyperarousal; and avoidance. What it leaves out is the contextual and existential significance of the event. Moreover, while PTSD might be representative or closely related to suffering, it leaves out the suffering experienced from other disorders, medical conditions or living conditions.

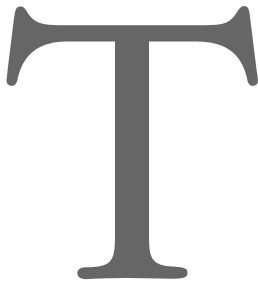
A recent study on suffering at end of life by Abraham and colleagues provides support for the social scientists, mainly that the source of suffering extends beyond pain to include emotional, spiritual and cultural dimensions. Moreover, the authors suggest that suffering is not just a solitary experience devoid of interpersonal context but also involves psychological and existential quality of life issues. Specifically, the study found that factors other than distress, such as diagnosis, age, and quality of life, affect perception of pain and suffering in patients. In addition, lack of distress from physical symptoms was not necessarily related to lack of suffering because of the symptoms or lack of overall suffering.

## **Future Research**

Although varying discourses on suffering exists, presently, there is a dearth of literature on suffering in psychology, perhaps because of the challenge of doing

research on a primarily phenomenological experience involving existential, spiritual and social dimensions. Nonetheless, people continue to seek out mental health workers desiring that their suffering be acknowledged, attended to, and alleviated. Yet, despite the health field's best intention to alleviate or eradicate pain and suffering, whether through pharmacological or therapeutic interventions, certain disorders appear to resist treatment. It may be that interventions focusing on the reduction of symptoms alone are not enough to alleviate suffering and that it is also important to address psychic and spiritual suffering. Additionally, it might be helpful to consider the contributions of the social, cultural and political environment on suffering and how these factors are uniquely internalized in the sufferer. Finally, it must be acknowledged that suffering is a reality of life and that certain problems may never be eradicated or cured. These unaddressed issues point to a need to reconsider the construct of suffering. Through the study of the multidimensional nature of suffering, psychology can reexamine pain, trauma and other disorders as social experiences shaped by multiple realities. Although there may be limits to operationalizing suffering, the study of suffering could be informed by the integration of the multiple definitions of suffering suggested by historical, existential, spiritual, and social perspectives. Further, current work on suffering in the fields of palliative medicine, theology, medical anthropology, and social sciences could help refine the experiential descriptions of suffering and suggest workable methods to define and measure it.

SEE ALSO: ► Buddhism ► Compassion ► Existential psychology



## **Taylor, Shelley**

Sally S. Dickerson

*University of California, Irvine*

Shelley E. Taylor (1946–) is a leading positive psychology scholar whose ground-breaking research examines how positive psychological and social resources (e.g., social support, optimism) can protect one's health. She has published over 300 papers that have shaped our understanding of factors that buffer individuals from the deleterious effects of stress, and the mechanisms through which this occurs. Dr Taylor received her bachelor's degree from Connecticut College and her PhD from Yale University. After teaching at Yale and Harvard University, she joined the faculty of University of California, Los Angeles in 1979, where she is currently a Distinguished Professor.

For the past 25 years, much of Dr Taylor's research has delineated how social and psychological resources promote positive adaptation under threatening situations. For example, she has documented that holding positive beliefs about the self or expectations about the future predict enhanced psychological and physical health, even when these beliefs are overly optimistic or unrealistic (i.e., positive illusions). Dr Taylor and her colleagues have found that these health benefits are due, in part, to reduced biological responses to stressors (e.g., dampened cardiovascular, hormonal, and immune reactivity) among individuals possessing these positive beliefs. She has tested her theories not only in healthy adults, but also in individuals facing life-threatening illnesses, enabling her to demonstrate that positive resources can prevent disease progression in certain populations. Dr Taylor also has elucidated how supportive, nurturing relationships can have health-protective effects, particularly under stressful situations. Her theoretical and empirical work has identified specific biological substrates – such as oxytocin

and endogenous opioids – that are implicated in these social processes, providing a potential mechanism linking positive social relationships with beneficial health outcomes.

Dr Taylor's work seamlessly integrates multiple scientific perspectives (e.g., health psychology, social neuroscience, genetics) and multiple levels of analysis (e.g., genetic contributions, neural mechanisms, emotional processes, physiological systems, cultural influences). As an illustrative example, Dr Taylor and colleagues recently found that growing up in a supportive, caring environment protected genetically "vulnerable" individuals from depressive symptoms in adulthood, demonstrating a powerful interaction between social processes, genetic predispositions, and positive health outcomes. Her unique brand of cross-cutting, interdisciplinary research has important applications for intervening to protect and optimize health and well-being.

Dr Taylor has received many prestigious research awards. In 2006, she was the inaugural recipient of the Clifton Strengths Prize, which recognizes groundbreaking theory, research and practice in positive psychology. She has received the William James Fellow Award from the Association for Psychological Science and the Distinguished Scientific Contribution Award from the American Psychological Association, the highest scientific honors bestowed by these organizations. Dr Taylor has also received Distinguished Scientist awards from numerous other organizations (e.g., Society for Experimental Social Psychology; Positive Psychology Initiative), and has been elected to membership in many selective scientific societies (e.g., American Academy of Arts and Sciences; Institute of Medicine, National Academy of Sciences). These prestigious honors attest to her seminal contributions to positive psychology as well as the broad impact of her work in the fields of psychology and medicine.

SEE ALSO: ► Health psychology ► Positive illusions ► Social support

## Teaching Positive Psychology

Amy C. Fineburg

*Spain Park High School/The University of Alabama*

Teaching positive psychology involves communicating the core concepts of positive psychology to students. Typically, instructors choose to teach positive psychology in two distinct ways: as a separate course specifically dedicated to positive psychology in general or certain topics in particular; or infused throughout a typical course in psychology. The positive psychology concepts that would be included in a course would depend on which approach a teacher chose to follow. If a teacher chose to teach a separate course in positive psychology, he or she might choose to teach a general overview of topics typically researched

in the field (e.g., happiness, flow, optimism, subjective well-being) or a course that focuses specifically on a particular topic. If a teacher chose to infuse a typical psychology course with positive psychology, the same types of topics would be addressed, but their mention would occur during the appropriate subunit in the course. For instance, when a teacher discusses depression in the psychological disorders unit, he or she might also discuss happiness and the ways in which one might “diagnose” happiness and interventions that could lead a person to greater happiness.

The teaching of positive psychology has overcome some roadblocks that inhibited its inclusion into courses and programs in psychology. In traditional psychology courses, curricular resources are populated with concepts that highlight the negative aspects of behavior. Many psychology textbooks emphasize the negative rather than the positive, encouraging teaching psychology from a negative perspective. The emphasis on negative aspects of behavior is supported by a decades of scientific research. Since World War II, psychologists have concentrated on diagnosing and curing mental illness rather than studying qualities that promote happiness or talent. Psychologists have been largely successful in identifying many major illnesses and finding successful treatments for them. Much of what is taught in psychology courses highlights these successes. Graduate programs in psychology also capitalize on the research funding available to those seeking to understand mental illness and disease. As a result, the canon of psychology includes more of the well-established concepts in negative psychology rather than positive psychology constructs. Research has shown that negative psychology terms are more prevalent than positive ones in introductory psychology textbooks. Students taking courses in psychology may leave with the impression that disease diagnosis and treatment are the only foci of psychology. Additionally, introductory psychology students most often recalled negative psychology and illness model concepts such as Phineas Gage and his brain injury, systematic desensitization, narcolepsy, Milgram’s obedience study, attitudes influencing behavior (presented through a “controversial issue” debate), and two disorders – dissociative identity disorder and schizophrenia. The teaching of positive psychology became an important goal for those interested in promoting the research and dissemination of positive psychology concepts and practices.

In 2000, Martin E. P. Seligman of the University of Pennsylvania brought together high school teachers and collegiate instructors to form the Positive Psychology Teaching Task Force, a group charged with developing curricula and dissemination strategies for positive psychology. The group hoped to strengthen positive psychology’s “fifth pillar” – the teaching of positive psychology. The task force, chaired by high school psychology teacher Randy Ernst of Lincoln, Nebraska, developed a unit plan for high school teachers, an essay contest for high school students, a website for posting syllabi, workshops for teachers and instructors led by task force members, and the development of textbooks for high school and collegiate audiences. The task force members worked extensively to encourage instructors to teach distinct courses in positive psychology and to

infuse positive psychology concepts into traditional psychology subject areas. The two-pronged approach was designed to support the growing positive psychology movement in two ways. Teaching distinct courses in positive psychology on the advanced undergraduate and graduate levels would give the movement credibility as a research area and develop graduate students interested in exploring positive psychology for a thesis or dissertation. Infusing positive psychology into high school and undergraduate courses would develop a generation of students who did not see psychology as “negative” and “positive,” and an integrated psychology including both disease and prevention models would emerge.

Separate courses in positive psychology have become popular in graduate and undergraduate programs where instructors who specialize in the field teach. Although similar programs in health psychology and other positive aspects of behavior had existed previously, the first courses to use the term *positive psychology* in the course title or course description were taught at Harvard University and the University of Pennsylvania in 1999. Robert Nozick of Harvard taught a course entitled *The Philosophy of Psychology* in which the reading list included numerous positive psychology readings. Martin E. P. Seligman, taught the first course entitled *Positive Psychology* to graduate students. Seligman has since offered courses in positive psychology to undergraduate students at Penn. Additionally, faculty at over 200 universities around the world offer positive psychology courses to advanced undergraduates and graduate students. In 2006, Harvard instructor Tal Ben-Shahar offered an undergraduate course in positive psychology which boasted the largest course enrollment (over 800) at the university that semester. Several textbooks have also been written to accommodate the growing popularity of these courses, authored by prominent positive psychologists including C. R. Snyder, Shane Lopez and Christopher Peterson. Numerous universities with cadres of faculty members dedicated to researching positive psychology offer PhD students the opportunity to conduct research in positive psychology. In 2004, Penn began a Master of Applied Positive Psychology (MAPP) program, the first of its kind.

Infusing positive psychology into existing curricula continues to be a major emphasis. According to the *National Standards for High School Psychology Curricula*, the major domains of psychology include biological bases of behavior, cognition, methodology, developmental psychology, and variations in individual and group behavior. Positive psychology concepts have been integrated into the current version of the *National Standards*. The *National Standards* are used to determine the content taught by high schools and introductory psychology teachers, and the integration of positive psychology concepts ensures the teaching of both positive and negative psychology. Several high school and introductory psychology textbooks now include positive psychology throughout, among them *Thinking About Psychology* and introductory texts by Myers.

SEE ALSO: ► Positive psychology (history) ► Seligman, Martin  
► Strengths perspective (positive psychology)



## Templeton Foundation, John M.

Robert Emmons

*University of California, Davis*

The John M. Templeton Foundation funds research projects that scientifically explore the link between religion and spirituality and the virtues and human strengths that reflect humanity's highest aspirations and noble qualities including, but not limited to: creativity; purpose; perseverance; gratitude; prayer; awe and wonder; personal responsibility; unlimited love; altruism; courage; honesty; joy; humility; talent and genius; and thrift and generosity. Cutting-edge work on these core themes is supported and encouraged by the foundation. New and generative methodological approaches that advance the science of spirituality are emphasized. The overall objective of the foundation's grant initiatives is to take research on the human spirit to new levels of scientific sophistication and significance. Beyond research on these core themes, the foundation's mission is to serve as a philanthropic catalyst for discovery in areas engaging life's biggest questions. These questions include explorations into the laws of nature and the universe such as: Do we have a soul? Is mathematics discovered or invented? Do we have free will? What is the nature of ultimate reality? What is freedom? What is the nature of divinity? These are the sorts of questions that are not usually supported by philanthropy, and are a distinguishing characteristic of the foundation.

The Templeton Foundation was established in 1987 by the internationally renowned financial investor Sir John Marks Templeton. Sir John Templeton's core vision for the foundation is to promote "enthusiasm for spiritual progress and new spiritual information" in drawing together the scientific and spiritual quests in ways that are serious, rigorous and open-minded (2000, p. 11). *Spiritual information* is a broad term that refers to knowledge generated through and by scientific research. The foundation seeks to strategically invest in research by scientists, scholars and high-level thinkers in ways that might lead to important advances in fundamental spiritual understanding via insight, blending the tools of empiricism with sophisticated conceptual analysis. Cosmology, evolutionary biology, mathematics, neuroscience, social science, and medicine are fields supported by foundation philanthropic investments. By increasing references to religious concepts in scientific journals and by moving religion into public discussion at universities, the foundation has sought to stimulate an appreciation for the importance of spiritual realities. Much of their success has resulted from the creation of transdisciplinary networks of scholars that has made it easier for previously marginalized "believers" within elite universities to form communities in a spirit of open-minded discovery. Sir John Templeton's motto is "how little we know, how eager to learn" (quoted in Harper, 2005, p. xvii).

The first programs that were sponsored by the foundation emphasized the constructive engagement of science and religion. Much of the spectrum of scholarly activity had to do with issues of current or recent scientific research as well as with a wide range of issues where the interface discussions are naturally philosophical (or theological or sociological or psychological) in nature. Course programs in science and religion in colleges and universities around the world represented a major emphasis of the foundation. Today, the Templeton Foundation funds hundreds of programs on science and religion, spirituality and health, religion and the human sciences (including positive psychology), and free enterprise. Among their most successful initiatives was the Campaign for Forgiveness Research, in which an initial \$2 million investment catalyzed the emergence of an entire scientific research discipline beginning in the late 1990s. This campaign has funded over 50 research projects and has generated more than \$5 million dollars in additional funding and resulted in scores of journal articles, chapters, and books on basic research and application of forgiveness principles. A number of other initiatives have funded various positive psychology programs including research on many of the core themes listed above.

The core challenge of the Templeton Foundation is to become an effective philanthropic catalyst for scientific discoveries and an influential worldwide hub for vision, creativity, and progress. To help realize this goal, six long-range strategies have recently been developed. These include: 1) working with top scientists and scholars from the world's top research institutions; 2) effectively communicating the vision of the Foundation; 3) developing signature programs in each philanthropic area (e.g., the core themes); 4) developing a solid reputation for scientific rigor and innovativeness; 5) building a culture of excellence in scientific philanthropy (in contrast to be known for doing "nice" things); and 6) encouraging opportunities for philanthropic innovation. Paraphrasing the mission of its founder, the Templeton Foundation exists to transform individuals so that they will quite naturally want to invest in whatever for them at that time will qualify as ways to use methods of science to advance "spiritual progress." The leadership of the foundation anticipates that such a transformation will lead to a greater appreciation for the infinite wonder, beauty, wisdom and creativity of the richness of an ultimate reality that surrounds them and makes life possible.

The foundation has not been immune from criticism. Some have accused it of having a religious agenda while others have been concerned that because of its considerable financial resources it is shaping the direction of science in a manner that is contrarian to traditional models of scientific advancement. In response the Foundation has argued that is not a religious organization and does not advocate or privilege a particular religious worldview. Rather, it welcomes proposals from researchers and theologians from all the major world religions, including non-Christian and non-Western perspectives.

Located in Conshohocken, Pennsylvania, outside Philadelphia, the Foundation now invests more than \$60 million dollars annually to support innovative grants

and research projects on a global scale. John M. Templeton, Jr., MD (“Jack”) is president and chairman of the John Templeton Foundation, and directs all foundation activities.

SEE ALSO: ► Religiousness ► Spirituality

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## Terman, Lewis

Jeff G. Rettew

*University of Kansas*

Psychologist Lewis M. Terman (1877–1956), spent most of his life studying individual differences with a focus on intelligence. Raised on an Indiana farm, Terman spent his early career as a schoolteacher and high school principal before receiving his doctorate in psychology from Clark University in 1905. After four years of teaching pedagogy at Los Angeles Normal School, he joined the education faculty at Stanford University in 1910. In 1922 he became head of Stanford’s Psychology Department, where he remained until retiring in 1942.

While at Stanford, Terman published a revised and perfected Binet-Simon scale for American populations. This “Stanford Revision of the Binet-Simon Scale,” became known as the “Stanford-Binet,” and was the most successful English language test of intelligence. The “Intelligence Quotient” or IQ, was an index that had not been previously used in mental tests. In 1917 Terman played a key role in the development of intelligence tests for the army, group-administered tests largely based on the Stanford-Binet. Such tests enabled large numbers of individuals to be tested at one time and, after the war, Terman used this efficient form of test administration in schools. In collaboration with psychologists who had worked on the army tests, he developed the “National Intelligence Tests” for grades three to eight. Throughout the 1920s he played a leading role in establishing the use of group intelligence tests in schools to classify students into homogeneous ability groups, called *tracking*, a practice that became well established in America by the 1930s. Terman was also a leader in the development of group achievement tests, which assessed school learning. He collaborated on the construction of the Stanford Achievement Test, the first of its kind.

Terman viewed intelligence as an adaptive quality that paved the way to life success, specifically national leadership. The widespread adoption of tests in

schools was how Terman conceived testing could be useful to American society, as the means of achieving his vision of a meritocracy. Consistent with the views of other leaders of the mental testing movement, Terman believed mental abilities were primarily hereditary. The highest purpose that testing could serve, according to Terman, was the identification of intellectually gifted children – the potential leaders of society. Therefore, in the 1920s, Terman began an unprecedented study of 1,500 intellectually gifted children (IQ > 140) in California. Data from the “Termites” (a participant-coined nickname), continues to be mined by psychologists today. Terman chose his participants to test the early ripe-early rot myth, whether high IQ children had intellectual success or failure as adults. Terman contended that unusually precocious children were more likely to bloom rather than wilt later in life. His findings included that the gifted were taller, healthier, physically better developed, and superior in leadership and social adaptability, dispelling the ubiquitous contrary opinion. Furthermore, most graduated from college and successfully landed professional jobs. To Terman’s consternation, however, few Termites went on to positions of national leadership.

SEE ALSO: ► Developmental psychology ► Giftedness ► Successful aging

## **The Nun Study**

Matthew W. Gallagher  
*University of Kansas*

In 1986, members of the School Sisters of Notre Dame religious community in Mankato, Minnesota agreed to participate in a study examining disability and aging. Since that time, what began as a small pilot project has transformed into one of the most groundbreaking and enlightening longitudinal psychological studies ever conducted. Now affectionately referred to as “The Nun Study,” the work conducted by David Snowdon and colleagues has helped to shape current knowledge regarding the potential for healthy aging, how the expression of positive emotions can promote longevity, and how linguistic markers such as idea density may provide early clues as to who will suffer from Alzheimer’s disease.

### **Methods of the Nun Study**

In 1990, members of the School Sisters of Notre Dame who were born before 1917 were asked to participate in a longitudinal study of healthy aging and Alzheimer’s disease. From seven congregations across the United States 678 women agreed to participate. These women ranged in age from 75 to 102 years old, with an average age of 83, when they were recruited to participate in the Nun Study. Each of these women agreed to undergo annual cognitive, physical,

and medical assessments including a series of tests assembled by the Consortium to Establish a Registry for Alzheimer's Disease (CERAD). Additionally, each of the 687 sisters agreed to donate their brains upon death so that the neuropathological assessments which are necessary to accurately diagnose Alzheimer's can be conducted.

## **Strengths of the Nun Study**

The Nun Study has many distinct characteristics that make it unique among longitudinal and epidemiological research and which make the findings of the Nun Study particularly important. Specifically, the women in the study have all lived very similar adult lives. They have all resided in similar convents for many years, they have all been celibate, none of them drink or smoke excessively, they have all had similar access to medical care, and they all had similar vocational experiences. Although it is true that the sample may not be representative of the general American population, the homogeneity of environmental factors removes many of the potential confounds that often hinder epidemiological studies. Researchers can therefore more confidently conclude that the individual differences between the nuns which have been found to predict various health outcomes may, in fact, be causal factors of those outcomes.

An additional unique advantage of the Nun Study is that, as previously mentioned, all 678 Sisters participating in the study have agreed to donate their brains to researchers upon their death. Scientists do not currently have a foolproof method of diagnosing Alzheimer's disease while individuals are living. Post-mortem neuropathological examinations are necessary to identify the neurofibrillary plaques and tangles that are indicative of Alzheimer's. The sacrifice of the School Sisters of Notre Dame will therefore allow researchers to amass an unprecedented collection of brains from a population and allow researchers to understand more fully how developmental and lifestyle factors may relate to the development of cognitive decline and Alzheimer's disease.

The most significant advantage of the Nun Study comes from a fortuitous discovery that occurred shortly after the study began. In 1930, the Mother Superior of the North American Sisters of Notre Dame requested that all of the Sisters compose an autobiography. Almost 60 years later the autobiographies of many of the Sisters who joined the order between 1931 and 1943 were found by David Snowdon and colleagues at the University of Kentucky when examining the archival records of the convents. These autobiographies and the accompanying medical and archival records have provided researchers with a treasure trove of information. Although the parameters of the autobiographies were very similar across the nuns, the style in which they were written varied dramatically and provided researchers with interesting clues regarding individual differences and cognitive abilities. In particular, the autobiographies of 180 Sisters from the Baltimore and Milwaukee convents have provided the data for many of the most fascinating findings of the Nun Study to date.

## **Findings from the Nun Study**

One of the most interesting findings of the Nun Study came from an examination of the emotional content of the autobiographies of these 180 nuns and the effects that this emotional content had on longevity. The autobiographies, written by the nuns at an average age of 22, were read and coded in terms of the raw number of positive, negative, or neutral emotional words included and the number of sentences which contained a positive, negative, or neutral emotional word. The outcome variables for this study were measures of mortality that were adjusted for the age at which the autobiography was written. What Danner, Snowdon, and Friesen found was that there was a strong association between the frequency of positive emotion expression in the autobiographies and the survival rates of these women almost 60 years later. The sisters who were in the highest quartile for number of sentences containing positive emotional content were found to have a median age of death of almost 7 years later than those sisters who were in the bottom quartile of positive emotions sentences. When examining the raw number of positive emotion words the effects were even more pronounced, a 9.4 year difference between the median age at death of individuals in the highest and lowest quartile of positive emotion words. Although the exact mechanisms mediating the apparent relationship between the expression of positive emotions and longevity are not yet clear, these findings provide one of the most powerful indicators to date that research examining the positive aspects of life may in fact lead to vital clues to how individuals can lead longer, healthier, and more productive lives. These findings have also recently been replicated in a study of the emotional content of the autobiographies of famous deceased psychologists.

## **Future of the Nun Study**

Perhaps the most remarkable aspect of the Nun Study is that it will continue for many years to come. Each of the Sisters will receive cognitive and medical assessments annually and, as previously mentioned, each participating Sister has agreed to donate her brain upon her death. The generosity of the Sisters will lead to the collection of an extraordinary amount of data that could provide the key to unlocking some of the secrets of Alzheimer's disease and how individual differences may promote healthy aging. The Nun Study provides a great model for future positive psychology research because it demonstrates how positive psychology constructs, in this case positive emotions, can have powerful effects on important life outcomes, survival and longevity. The Nun Study also demonstrates the importance of conducting longitudinal research which can, more effectively, tease apart complex cause and effect relationships. Finally, the Nun Study provides a great example of the dramatic impact a small group of people, 678 nuns, can

have when they unite behind the shared goal of improving the knowledge and well-being of our society.

SEE ALSO: ► Developmental psychology ► Positive emotions  
► Successful aging

## Transformational Leadership

Ronald E. Riggio

*Claremont McKenna College*

In 1978, political scholar, James MacGregor Burns, published *Leadership*, a book that distinguished between traditional leaders who use a more transactional leadership style and transformational leaders. Transactional leaders offer social exchange – money for labor, or recognition in exchange for loyalty. Transformational leaders raise leadership to a higher level. Transformational leaders inspire followers to achieve extraordinary outcomes, and in the process, they help develop followers' own leadership qualities. Transformational leaders are often seen as *visionary* and as agents of change.

An important central element of Burns's theory is the moral quality of transformational leaders who are more concerned with the common good than achieving their own self-interests. It is this moral or ethical element that distinguishes transformational leadership from earlier notions of charismatic leadership. While both transformational leaders and charismatic leaders are able to inspire followers with a compelling vision, transformational leaders go beyond mere charisma and strive to develop meaningful interpersonal relationships with followers and are characterized by a concern for individual followers' needs. Moreover, while charismatic leaders can be both morally good or bad (e.g., Hitler), transformational leaders, by definition, are ethical and put concerns of others over their own.

Inspired by Burns's work, psychologist Bernard M. Bass developed the concept of transformational leadership further, including outlining the components of transformational leadership, measuring these leadership components, and demonstrating that transformational leaders do indeed lead groups to high levels of performance and follower commitment. As a result of both Bass's efforts and the positive nature of the theory, transformational leadership has become the most researched theory of leadership from the 1990s forward.

## Components of Transformational Leadership

The four components that make up transformational leadership are: idealized influence; inspirational motivation; intellectual stimulation; and individualized consideration.

### Idealized Influence

Transformational leaders serve as positive role models for their followers. They emphasize the collective mission of the group or organization and demonstrate high standards of ethical conduct. As a result, followers want to be like the leader, they believe the leader has extraordinary capabilities, and they have great admiration and respect for the leader.

### Inspirational Motivation

Transformational leaders are able to inspire and motivate followers through their display of enthusiasm, optimism and the articulation of attractive future outcomes. Together, the components of idealized influence and inspirational motivation represent the transformational leader's charisma.

### Intellectual Stimulation

Transformational leaders challenge followers in an effort to stimulate their creativity and innovation. They do this by questioning assumptions, reframing problems, and encouraging followers to take risks and try new approaches.

### Individualized Consideration

Focusing on individual followers, transformational leaders pay particular attention to each follower's needs, concerns, and personal development and growth. The leader accepts that there are individual differences in followers and encourages the personalized development of each one through mentoring and coaching.

Although many leaders could have the qualities associated with transformational leaders, such as charisma, Burns describes truly transformational leaders as "morally uplifting." Initially, Bass did not include this moral component in his conceptualization of transformational leaders. In recent years, however, Bass has agreed with Burns about the necessity for the moral element, referring to leaders who are self-serving and only appear to be concerned about followers, as *pseudotransformational*, or *inauthentic* transformational leaders.

Together Bass and leadership scholar, Bruce Avolio, created the Multifactor Leadership Questionnaire (MLQ), which measures each of the four components, and is widely used in research on transformational leadership. This measure requires followers to rate their leaders using the MLQ items. In their full range of leadership model, Bass and Avolio view leadership as a continuum of effectiveness, with transformational leadership at the top, transactional leadership as effective, but less so than transformational leadership, and laissez-faire leadership – where the leader abdicates his or her leadership obligations – at the bottom. In addition to measuring the components of transformational leadership,



the MLQ also assesses laissez-faire leadership and different forms of transactional leadership.

## **Research on Transformational Leadership**

Research has clearly demonstrated that transformational leaders lead groups that are more committed and loyal to their leaders. The level of satisfaction of followers of transformational leaders is also quite high. As a result, groups led by transformational leaders are also more effective than groups led by nontransformational leaders, in terms of both ratings made of group performance and more objective measures of group productivity.

Transformational leaders affect followers through the building of a relationship characterized by trust and mutual respect. The transformational leader holds high expectations for follower performance, but provides the inspiration, encouragement, and stimulation to think creatively that followers need to reach and maintain high performance levels. As a result, followers of transformational leaders develop self-esteem and a sense of self-efficacy in their abilities to succeed. This then translates into more effective performance and high levels of group loyalty and job satisfaction.

Bass also asserts that transformational leaders are particularly effective in conditions of crisis and stress. He cites leaders such as Mahatma Gandhi, Franklin Roosevelt, and Winston Churchill who were effective in calming followers' fears in times of crisis. Inspiring courage and stimulating innovative thinking and solutions, transformational leaders help followers turn stressful situations into challenging ones.

Bass, Avolio, and colleagues have shown that transformational leadership training can produce leaders who do indeed enhance followers' loyalty and commitment, although developing transformational qualities requires a great deal of time and effort. Some success has also been achieved in training work groups for transformational team leadership.

## **The Future**

Research on transformational leadership continues at a robust rate. The popularity of the theory stems in part from its positive nature. In fact, critics have suggested that transformational leadership is really just a description of an "ideal leader." In looking toward the future of work on transformational leadership, Bass suggests that women, who tend to be more transformational than men, will have much better representation in upper-level management and leadership positions. He also notes that leaders who are able to develop followers through coaching and mentoring – hallmarks of the individualized consideration characteristic of transformational leaders – will be a future leadership requirement, as will leaders with a strong ethical orientation.

In looking toward the future, James MacGregor Burns suggests that the future “test” for transformational leaders will be to address significant global problems such as world poverty and hunger. He views leadership as a moral undertaking and transformational leadership as the epitome of good leadership.

SEE ALSO: ► Charisma ► Job satisfaction ► Leadership ► Self-efficacy  
► Self-esteem

# U

## Utilitarianism

James O. Pawelski and Maya C. Gupta

*University of Pennsylvania*

Utilitarianism is the view that utility (defined variously as pleasure, happiness, well-being, and the like) should be maximized. In its classical form, utilitarianism contains an element of hedonism, which equates utility with pleasure. Utilitarianism assumes that utility is measurable and that it is possible to maximize it impartially within a society. The idea that actions are good to the extent that their consequences maximize utility is one of Western philosophy's major ethical doctrines.

## History of Utilitarianism

Although Jeremy Bentham (1748–1832) is usually considered to be the founder of utilitarianism, its hedonic dimensions can be traced back to the ancients. In a passage in Plato's *Protagoras*, Socrates equates the pleasant and the good – the fundamental assumption of hedonism. The classical utilitarians Bentham and John Stuart Mill (1806–1873) adopted this assumption, and can hence be characterized as hedonistic utilitarians. Utilitarianism, however, need not be a hedonistic doctrine: twentieth century philosophers such as G. E. Moore and John Dewey rejected in part or whole the hedonistic aspects of utilitarianism in favor of ideal theories of utility, which hold that some things can be inherently good or bad independent of the pleasure derived from them.

Jeremy Bentham invented a hedonic (also called “felicific”) calculus as a method for quantifying utility. His hedonic calculus measured pleasure in terms of *hedons* and pain in terms of *dolors*. He divided pleasure into seven categories: intensity,

duration, certainty, propinquity in time, fecundity, and extent. John Stuart Mill recognized that such a calculus, under certain circumstances, does not accord with ordinary moral perceptions (a pleasure such as attending a party might rank higher in all of Bentham's categories than a pleasure such as reading a poem). To correct this cognitive dissonance, Mill sought to rank pleasures by their quality, as well, and not just by their quantity.

It is possible to found an egoistic ethical doctrine on the basis of a hedonic calculus like Bentham's, that is, to assert that goodness consists of engaging in acts which maximize the pleasure of the person who commits them. Bentham and Mill, however, viewed utilitarianism as a universalistic, social doctrine which implies that the pleasure and pain of all affected by a given act should be considered, not just the pleasure and pain of the act's perpetrator.

Both egoistic and universalistic positions, it should be noted, indicate that an action is good or bad depending solely upon its consequences, as opposed to, for instance, the intent of the agent; in other words, they are *act consequentialist* positions. Critics have pointed out that act consequentialism, be it egoistic or universalistic, can have unpalatable implications (punishing an innocent man for a crime he did not commit, if it deters hundreds of others from committing crimes themselves, is good according to act consequentialism because it maximizes utility). This has led some utilitarians to embrace *rule consequentialism* – the view that good actions are ones that conform to a general, hypothetical rule which, if obeyed, would maximize utility. (Since punishing innocent men does not generally lead to the maximization of utility, such punishment should not be practiced.)

Several problems linger in utilitarian doctrine. First, the hedonistic view that nothing is good but pleasure excludes meaning and other elements that ordinary moral perceptions might indicate are important to human flourishing. Furthermore, under a Benthamite approach, the utilitarian must face the problem of measuring pleasure and pain. For an individual actually to perform a hedonic calculus like the one Bentham outlines is difficult enough, but when it is a matter of measuring the collective balance of pleasure over pain for a group of individuals, as universalistic utilitarianism demands, the consequences can be philosophically alarming (recommending, under certain circumstances, that a small number of lives be sacrificed in the interest of the greater pleasure of the many). Another problem with utilitarianism is that it rests on the assumption of interpersonal comparability, an assumption which, if invalid, seems as though it would undermine the foundations of utilitarianism. Finally, while universalistic utilitarianism is a lofty ideal, it is unclear just how far individuals will go in sacrificing their own private happiness in the interest of the public good.

## Utilitarianism and Positive Psychology

Utilitarianism has had an important influence on some areas of positive psychology. The work of Ed Diener, Daniel Kahneman, and others on subjective

well-being, for example, is utilitarian in nature. Subjective well-being (a term coined by Diener as a scientific synonym for happiness) is based on a hedonic theory of happiness and is defined in terms of high positive affect, low negative affect, and high life satisfaction. In good universalistic utilitarian fashion, researchers in this area argue that subjective well-being should be maximized not just for individuals, but for all. For this reason, they advocate the establishment of well-being indicators to measure national averages of subjective well-being. The maximization of these national averages could then be an intentional goal of public policy decisions.

It should be noted that these positive psychologists are also helping to advance utilitarianism. As mentioned previously, one of the notorious difficulties of utilitarianism has been the measurement of happiness. Operationalizing happiness in terms of affect and life satisfaction allows for much more effective measurement. Until now, economists have mainly relied on economic indicators as proxies for happiness. But increasing evidence that wealth and happiness are not correlated well enough to justify this reliance point to the need for subjective well-being indicators as complements to economic indicators. Thus, subjective well-being research is helping to provide more reliable ways of measuring happiness and its maximization.

Not all positive psychology is based on utilitarianism, however. The work of Peterson and Seligman on strengths and virtues is based on virtue ethics and a eudaimonic theory of happiness. While utilitarians argue that ethics is about choosing actions that will lead to the best consequences (the maximizing of happiness), virtue ethicists argue that the emphasis should be on becoming a good person. And while hedonic theories hold happiness to be a function of subjective mental states, eudaimonic theories emphasize the importance of objective factors including biological tendencies, environmental conditions, and the cultivation of individual character traits. Strengths-based approaches argue that the development of good character may not always be pleasant, but that it is an important part of happiness. On these approaches, pleasure may be a by-product of a good life, but not its direct aim.

While positive psychologists recognize these differences in perspectives, they also work toward their reconciliation. Subjective well-being is not a purely hedonic view, since it includes not only affect measures, but also life satisfaction. Furthermore, Diener holds that subjective well-being is a necessary but not sufficient condition for the good life. It is one important thing we desire, but not the only one. On the other side, Seligman and Csikszentmihalyi (2000) have defined positive psychology as the "science of positive subjective experience, positive individual traits, and positive institutions" (p. 5), indicating the importance of both subjective well-being approaches and strengths-based approaches. Seligman has developed this position further in terms of what he sees as three equally valuable pathways to happiness: the pleasant life (emphasizing subjective well-being), the engaged life (emphasizing strengths), and the meaningful life (emphasizing strengths used in the service of something larger than the self).

The nature of the relation between utilitarianism and positive psychology calls for further work in at least two different areas. First, positive psychologists must continue to reconcile utilitarian with nonutilitarian elements of positive psychology. Further work is needed to determine whether the utilitarian threads in positive psychology are incompatible with those from virtue ethics, whether they can simply peacefully coexist, or whether it will be possible and desirable to create a single, integrated view. Since hedonic and eudaimonic theories of happiness seem mutually incompatible, further work is also needed to determine whether they can both continue to play central roles in positive psychology.

Second, utilitarianism has passed along to subjective well-being research some thorny problems. As discussed, a key problem in utilitarianism is the measurement of happiness. Defining happiness as subjective well-being, and then resolving subjective well-being into the more easily measured factors of affect and life satisfaction, seem to be promising steps (although eudaimonic theorists will not be satisfied with this hedonistic definition of happiness). Unfortunately, affect and life-satisfaction levels are currently determined chiefly through self-report measures, and there is ongoing debate as to the reliability of such measures. For this reason, researchers are looking for other, more objective measurements of subjective well-being that may bolster the accuracy with which happiness can be measured. Another utilitarian problem subjective well-being researchers have inherited is an ethical one, going back to the distinction between egoistic and universalistic utilitarianism. If subjective well-being is to be maximized, should it be done on the individual level, or on the universal level? It seems that these two levels will often, if not always, be incompatible. This raises a larger question (with cultural implications) for positive psychology in general. Is positive psychology chiefly about individual happiness or about collective happiness? Some researchers are suggesting that a balance must be struck between these two approaches. Perhaps such a balance would be the ideal way of maximizing utility.

SEE ALSO: ► Hedonics ► Virtue ► Virtue ethics

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## Values

Sonia Roccas<sup>a</sup> and Lilach Sagiv<sup>b</sup>

<sup>a</sup>*The Open University of Israel*; <sup>b</sup>*The Hebrew University of Jerusalem*

### What Values Are

Personal values represent transsituational desirable goals that serve as guiding principles in peoples' lives. Values express what people believe to be good or bad, desirable or objectionable and what they think should or should not be done. As guiding principles, values affect the way people perceive and interpret the world and their preferences, choices, emotions, and actions. Values are organized hierarchically: Whereas all values are desirable to most people, each person has a unique value hierarchy. Some values are of supreme importance, others are very important, and some are only moderately important. The more important a value to a person, the more it is likely to serve as a guiding principle. Consider the example of the value of independence. A person who emphasizes this value is likely to prefer an occupation that allows some autonomy in crafting her/his tasks; to vote for a political party that endorses freedom; to judge severely infractions of people's freedom; and prefer to send his/her children to schools that encourage them to express independence of thought and action.

### What Values Are Not

Values differ from other personal attributes in several important ways. Values transcend specific situations: They are important across situations and over time.

This feature distinguishes values from norms, attitudes, and specific goals, which usually refer to specific actions, objects, or situations. In addition, values may serve as standards or criteria and provide social justification for choices and behaviors, distinguishing them from personal attributes like traits or interests. Whereas traits, needs and motives may be either positive or negative, values are inherently desirable. Unlike needs and motives that may be unconscious, values must be represented cognitively in ways that enable people to communicate about them. Finally, values differ from other personal attributes because they are ordered by subjective importance, forming a hierarchy of value priorities. So far, little research has empirically addressed the question of differences between values and close constructs. Examining these differences and their implications for attitudes and behavior provide directions for future research.

## Content and Structure of Values

For many years, research in psychology devoted relatively little attention to the study of values. Milton Rokeach contributed more than any other researcher to creating a new momentum in value research. Rokeach suggested that personal values serve as reference points which people use to formulate attitudes and behaviors, and developed a self-report measure of personal values, distinguishing between instrumental and terminal values.

Building on Rokeach, Shalom Schwartz proposed a theory of the content and structure of personal values. Schwartz suggested that values differ in the type of motivational goal they express. Based on universal requirements of human existence, Schwartz identified ten motivationally distinct types of values: power; achievement; hedonism; stimulation; self-direction; universalism; benevolence; tradition; conformity; and security.

Actions taken in the pursuit of a certain value type carry social, psychological and practical consequences that might conflict or may be compatible with the pursuit of other value types. Thus, for example, taking a trip to the Amazon jungles may serve to fulfill stimulation values that reflect the motivation to experience change and novelty and to be daring and adventurous. It is also compatible with emphasizing self-direction values that reflect the motivation for autonomy of thought and actions. Wandering in the jungles, conflicts, however, with emphasizing security values which reflect the motivation to maintain safety and stability. The total pattern of conflict and compatibility among value priorities yields a circular structure of value systems, in which competing value types emanate in opposing directions from the center, and complementary types are adjacent going around the circle.

The circular structure of values can be summarized into two basic conflicts. The first conflict is *self-enhancement* vs. *self-transcendence*. Self-enhancement values emphasize the pursuit of self-interest by focusing on gaining control over people and resources (power) or by demonstrating ambition and competence according



to social standards and attaining success (achievement). These values conflict with self-transcendence values that emphasize serving the interests of others: expressing concern and care for those with whom one has frequent contact (benevolence) or expressing acceptance, tolerance, and concern for all people regardless of group membership (universalism).

The second conflict is *openness to change* vs. *conservation*. Openness to change emphasizes openness to new experiences: autonomy of thought and action (self-direction); and novelty and excitement (stimulation). These values conflict with conservation values that emphasize preserving the status quo: commitment to past beliefs and customs (tradition); adhering to social norms and expectations (conformity); and preference for stability and security for self and close others (security). Hedonism values share elements of both openness and self-enhancement and are in conflict with self-transcendence and conservation values.

The Schwartz theory has been tested in cross-cultural research in more than 200 samples from over 70 countries and received strong empirical support. This research indicates that the meaning of the 10 value types is similar across most cultures. In addition, there is a considerable consensus regarding the hierarchical order of values: Comparing the value ratings of individuals in more than 50 nations revealed that benevolence, self-direction, and universalism values are consistently among the most important values, whereas power, tradition, and stimulation values among the least important. Still, there are substantial cross-cultural differences in values. Moreover, individuals within a culture vary substantially in the importance they attribute to different values.

## Social Correlates of Values

Gender differences in the importance attributed to values are surprisingly small. These differences are, however, consistent across many cultural groups: Men tend to value slightly more than women self-enhancement and openness to change; the reverse is true for self-transcendence values. Socioeconomic status has a greater impact: In a monumental longitudinal research, Kohn and Schooler found that people whose place in the social structure leads them to jobs characterized by high complexity increase the importance they attribute to self-direction versus conformity values.

The pattern of correlations between values and religiosity is strikingly consistent across monotheistic religions: Among Catholics, Protestants, Greek-Orthodox, Muslims, and Jews, religiosity correlated positively with emphasizing conservation values and negatively with emphasizing values of openness to change. Families are powerful vehicles of value socialization. Research identified several mechanisms through which parents' values are transmitted, such as child rearing practices and the accuracy in perception of parents' values. Note, however, that much of the value similarity between parents and children can be attributed to their sharing the same culture, socioeconomic status, and immediate environment. Future

research should aim to achieve a better understanding of how society shapes values of individuals.

## **Values and Behavior**

Values and behaviors are closely linked. The same value type may lead to many different behaviors, and the same behavior may be the result of different values. Thus, for example, a student's decision whether to stay at home and study for a test or to join his/her friends and go to the cinema has implications for achievement, hedonism, benevolence and conformity values. Trying to predict the behavior based on one only of these values is likely to fail: It is the tradeoff among competing values that guides behavior, rather than the importance attributed to any single value.

Studies conducted in the last decade found that values are related to a large variety of behaviors and behavioral intentions, ranging from daily actions such as the decision how much to study for an exam, to substantial decisions such as career choice and political voting. Values were related to consumer purchases, cooperation and competition, counselee behavioral style, delinquent behavior, environmental behavior, tolerance towards outgroup members, willingness to use innovative technology and more.

Recent studies pointed out the complex ways through which values guide behavior. Values influence behavior when they are highly accessible. Moreover, reflecting about the reasons for endorsing values increases the associations between values and behavior. The strength of associations between values and behaviors depends also on the type of behavior: The correlations are relatively weak for behaviors that are socially desirable. Furthermore, people vary in the extent to which their behavior matches their values: Values are related to behavior more strongly for people who attribute low importance to conformity values, which reflect the motivation to comply with social norms, than for people who value strongly conformity.

## **Values and Well-Being**

The links between values and well-being are of special interest because they relate to the basic issue of what makes people happy. Values are related to well-being through multiple pathways. Self-determination theory engendered a view that directly links values and well-being: Values and strivings that are intrinsic by nature (autonomy, relatedness and competence) lead to positive well-being because they reflect self-actualization needs that are inherent to human beings. A second path toward happiness is suggested by the goal-attainment perspective: According to this view, well-being results from the attainment of goals that are pursued for intrinsic reasons, irrespective of the value content of those goals. The third path,

suggests that it is the fit between individuals and their environments that affects subjective well-being. According to that path, even extrinsic values may lead to a positive sense of well-being if a person holding such values operates in an environment that encourages these values.

## **Cultural-Level Values: Values of Social Collectives**

Values of cultural groups allow for the understanding of cultural differences. Cultural values are shared, abstract ideas about what a social collectivity views as good, right, and desirable. They are the broad goals that members of the collectivity are encouraged to pursue; they serve to justify actions taken in pursuit of these goals. Consequently, cultural values play a crucial role in the way that social institutions function.

Cultural values can be inferred using a variety of methods. One possible way is asking individuals to report the values that are important in their cultures. This, however, can be problematic because individuals may have highly biased or inaccurate ideas of the values endorsed by the larger culture. An alternative approach is to infer cultural values from artifacts produced by the culture such as symbols, rituals and archival documents. The validity of this approach depends on the accuracy of the interpretation of these artifacts. The large-scale studies comparing dozens of cultures adopted a third approach: They asked people to report their own personal values and aggregated across individuals to determine what values are “shared” within the culture. This approach allows for a systematic comparison across cultures. It also has limitations, however: It can reflect only those cultural values that are translated into personal motivations and are reflected in individual-level values.

Studies of cultural values have focused most extensively on nations. Hofstede originated the first major endeavor to understand cultural differences in values. He studied more than 100,000 IBM employees from about 50 nations. He identified four value dimensions. *Individualism* vs. *collectivism* refers to the relative importance of self as opposed to community identification. In individualistic societies, ties among people are loose: Individuals are expected to take care of themselves and those close to them only. In collectivistic societies, in contrast, people are strongly integrated into groups. They feel obligated to express loyalty to the ingroup, which, in return, protects them throughout life. Power distance refers to the extent to which power inequality is accepted as legitimate: In all societies, resources are distributed somewhat unequally. When power distance is high, however, this is seen as acceptable. *Masculinity* vs. *femininity* describes the relative importance of personal accomplishments, *success and power* vs. *relatedness and nurturing*. Finally, *uncertainty avoidance* refers to the extent to which people feel threatened by uncertainty, and respond by setting up rules. To date, Hofstede’s seminal work is the most influential and yielded numerous studies. The four cultural dimensions have been related to a variety of social, political and organizational indices. Individualism-collectivism is by far the most studied dimension.

Hofstede's dimensions did not originate from any explicit theory. The dimensions identified are bounded by the topics (and items) included in the questionnaire used to assess them. Researchers have pointed out that this questionnaire largely reflects Western thinking. Taking a different approach, Michel Bond developed a value measure based largely on what Chinese researchers considered important in Chinese culture. Studying student samples from 23 countries, Bond identified four factors that distinguish among cultures. Three of these factors correlated with Hofstede's dimensions (no factor correlated with Uncertainty Avoidance). The fourth, unique, factor was termed *Confucian work dynamism*. Hofstede later adopted this as a fifth cultural dimension, and labeled it *long-term orientation*. Hofstede views this dimension as opposing a dynamic future orientation to a static present and past orientation.

Another large-scale project comparing cultural values was initiated by Schwartz. After establishing a cross-cultural equivalence in the meaning of values at the individual level, Schwartz aggregated these values to create cultural-level indices. He studied both students and teacher samples and found consistent cultural differences in the two populations.

Schwartz considered three basic issues that confront all societies. He derived three bipolar cultural dimensions that reflect possible solutions to those issues or challenges. The location of each society on each cultural dimension reflects the culture of that society. The first issue considered by Schwartz was the extent to which people are *autonomous* vs. *embedded* in their groups. In embedded cultures, people are viewed as entities embedded in the collectivity who find meaning in life through identification with the group and participation in its shared way of life. In autonomous cultures, in contrast, individuals are viewed as autonomous, bounded entities who find meaning in their own uniqueness and who are encouraged to express their internal attributes. Schwartz distinguished two types of autonomy: affective and intellectual.

The second challenge that confronts all societies is how to guarantee responsible behavior to preserve the social fabric. Cultures high on hierarchy rely on hierarchical systems of ascribed roles to insure responsible behavior. People are socialized and sanctioned to comply with the obligations and rules attached to their roles. Where egalitarianism is high, people are encouraged to recognize one another as moral equals who share basic rights as human beings. People are socialized to cooperate with others and to be concerned for everyone's welfare. The third issue is how to regulate the relation of humankind to the natural world. Mastery values encourage active self-assertion in order to master, change, and exploit the natural and social environment to attain personal or group goals. Harmony values encourage individuals to accept and comprehend the world as it is, and to fit in to this world rather than to change or exploit it.

Whereas all other large-scale projects examined values of specific groups in society, the value project headed by Inglehart studied representative samples of 63 nations. He identified two main value dimensions: *survival* vs. *self-expression* values, and *traditional* vs. *secular-rational* values. Survival values emphasize giving

priority to economic and physical security over self-expression and quality-of-life. Self-expression values emphasize the opposite. Traditional values emphasize conservative views, and the importance of God rather than independence and determination. Secular-rational values emphasize the opposite. Inglehart found that value emphases in the society correlate with the religion dominant in that society. For example, Protestant European countries attributed very high importance both to self-expression and to secular-rational values, whereas Catholic European countries attributed only moderate importance to both types of values.

A promising direction for future research is multilevel analyses which examine how individual values interact with cultural values in affecting behavior. Another important line of future research is achieving a better understanding of patterns of stability and change in values. At the personal level, it is of interest to investigate how values develop through the lifespan. At the cultural level, of special interest are nations that are undergoing profound sociopolitical changes.

SEE ALSO: ► Indigenous positive psychology ► Well-being

## **Vigor**

Arie Shirom and Ofira Shrager

*Tel Aviv University*

Vigor is the sense of possessing physical strength, emotional energy and cognitive liveliness. In the context of work, it represents a discrete, positive affective response to one's ongoing interaction with specific elements in the work environment and with the workplace situation as a whole.

The construct of vigor goes back a long way in human history. The Taoist culture of ancient China refers to *Chi* and *Jing* as representing the feeling of having internal energy and power which can be accessed by individuals, depending on their lifestyles and personal habits, while in ancient Japanese cultural traditions the concept of *Ki* related to one's feelings of being able to mobilize mental and physical energy. Psychoanalytic thought, including the contributions of Freud, Jung, and Perls, emphasized the construct of psychic energy, mostly arguing that it could be lost (as when investing it in defenses or conflicts) or gained in various ways, depending on how it is invested.

## **Vigor as an Affective State**

Following widely accepted views of emotions and moods, vigor combines elements of a specific emotion in that it is contextualized in the work situation, but it is closer to a mood state in that it tends to last days and even weeks. Therefore, we refer to vigor as a specific affective state that combines elements of an emotion and of a mood state. Like all other specific affective states, vigor represents a

fundamental action tendency. Following Lazarus' appraisal theory, individuals' appraisals of their energetic resources are theoretically distinct from the feeling of vigor. In nature, these appraisals and the feeling of vigor probably appear conjoined, mutually affecting each other over time. The focus on vigor as an affective state follows the cognitive-motivational-relational theory developed by Lazarus and his colleagues. This theory implies a discrete-category approach to affective states, each having its own core relational themes and coping implications. It follows that understanding the antecedents and consequences of each enriches and extends our understanding of employees' attempts to survive and flourish in their work environment.

### Vigor and Other Affective States

How does vigor relate to other affective states? Russell proposed that each affective state can be identified and differentiated from other affective states by where it lies on the two-dimensional space consisting of the horizontal pleasure-displeasure dimension and the vertical arousal-sleepiness dimension. In this two-dimensional space, vigor represents positive arousal or a combination of moderate amounts of arousal and pleasure, probably akin to what Thayer referred to as calm-energy. In the same space, vigor's counterpart in the displeasure-arousal quadrant is anxiety, and its mirror-image in the displeasure-sleepiness quadrant is burnout, combining displeasure with lack of arousal. In contrast to burnout and anxiety, however, vigor is a component of the approach-oriented behavior facilitation system. This system, directs organisms toward situations and experiences that may potentially yield pleasure and reward and facilitates the procuring of resources like food, shelter and sexual partners – resources that are essential for the survival of both the individual and the species.

### Vigor's Conceptual Framework

Vigor is seen as a composite variable, comprised of three interrelated affective components, namely one's feelings concerning one's: 1) physical strength; 2) emotional energy; and 3) cognitive liveliness. Theoretically, this view of vigor is derived from Hobfoll's conservation of resources (COR) theory, according to which people are motivated to obtain, retain and protect their resources, which can be material, social or energetic. The concept of vigor relates to physical, emotional and cognitive energetic resources for several reasons. The first follows from the COR theory argument that personal resources are closely interrelated and that the expansion of one is associated with the others being augmented. The second reason is that these components represent the three most salient domains of energy that humans possess: physical, emotional (relating specifically to one's interpersonal interactions with others and one's feeling capable of expressing empathy and sympathy to others) and cognitive (relating to one's feelings concerning one's capability of generating ideas, his/her vital thought processes, etc).

How does vigor relate to affective states that reside on the opposite pole, representing the combination of low arousal and displeasure? Some measures of vigor as a mood state were based on the theoretical position that the vigor and burnout (or chronic fatigue) pair represented bipolar affective states on the same dimension that could not be experienced simultaneously. In contrast, we argue for the theoretical position that vigor and burnout are obliquely related and do not represent the extreme poles of the same continuum, with the exception perhaps of situations characterized by very high levels of stress. This theoretical position rests first on the fact that the underlying biological systems of approach and avoidance activations have been shown to be basically independent. Second, positive and negative affective states are physiologically represented in different systems. Third, positive and negative affective states are known to have different antecedents, and may function relatively independently. Therefore, on theoretical grounds, it could be concluded that the relationships between positive and negative affective states is not bipolar but bivariate. Considerable support for this position has been provided by studies that have found different across-time fluctuations of positive and negative affect, and that the relationship among tension and energy self-ratings is not bipolar.

## **Measures of Vigor as a Mood State**

### **The Profile of Mood States**

The Profile of Mood States, abbreviated as POMS and first published in 1971 by McNair and his associates, was one of the earliest measures of any positive mood. Among its six subscales of different moods, the POMS includes an eight-item subscale gauging vigor-activity, using items like feeling cheerful, lively, alert, active, carefree and vigorous, which on the face of it probably represents a combination of vitality and vigor. Results that concern the vigor subscale have often been reported in studies using the POMS. In the area of exercise psychology, a recent meta-analysis of 26 studies that used the POMS vigor scale found that chronic exercise increased feelings of energy by a mean effect size of .37. Several additional studies have used the POMS and its vigor subscale to predict physiological outcomes, like sleep quality. Different aspects of the construct validity of this scale have been extensively studied, but primarily with clinical samples such as cancer patients, drug abusers and patients undergoing brief psychotherapy. Hardly any studies have related to work organizations.

### **Other Measures of Vigor as a Mood State**

A widely used measure of mood is the Activation-Deactivation Adjective Check List, available in short- and long-forms, described in Thayer's book. It includes a subscale that gauges energy level. Mood inventories developed by other

researchers also include measures of vigor or energy levels. Additional scales, used much less frequently, were described in the recent volume on character strengths and virtues by Peterson and Seligman. The set of studies on engagement by Schaufeli and his colleagues is not covered here because these investigators defined vigor, in their conceptualization of engagement, as comprising of high levels of energy, motivation to invest effort at work, and resilience; clearly, they refer to vigor as a cluster of different evaluative or attitudinal facets and not as an affective state. In sharp contrast, vigor, as conceptualized here, is an affective state not confounded with motivational processes or with individuals' behaviors following encounters with adverse events – namely resilience. Vigor at work can be experienced with or without encounters with adverse events.

A construct that overlaps to a certain extent with vigor is that of vitality, conceptualized by Ryan and Frederick as referring to the subjective experience of being full of energy, alert, and alive or vital. It overlaps in that both vigor and vitality refer to one's feeling energetic as reflecting one's internal resources and as unrelated to specific stimuli in one's environment. Vitality includes also the components of feeling alive and vital and of feeling awake and alert. Future research on the vitality measure has yet to test the possibility that the vitality measure actually represented two different dimensions, vigor and vitality, respectively.

This review of past attempts to gauge vigor as a mood state leads to the following conclusions. First, vigor has been studied primarily as a mood state. Second, vigor has hardly been studied in the work environment; in most past studies, respondents were patients, students, or sportsmen. Third, in past research, vigor has been conceptualized as reflecting one form of energy – physical strength. This is in contrast to the current focus on vigor as an affective experience at work reflecting three interrelated forms of energetic resources. Fourth, some measures adopted the practice of reverse-scoring tiredness or fatigue items in the vigor scales to arrive at a total score representing the positive mood of vigor, while above we argued that this practice is problematic on both theoretical and methodological grounds.

SEE ALSO: ► Positive affectivity

## Virtue Ethics

Blaine J. Fowers

*University of Miami*

*Virtue ethics* refers to the contemporary study of virtue, which has appropriated Aristotle's account of virtue and the good life in the *Nicomachean Ethics* for present-day concerns. The core idea of virtue ethics is the concept of *eudaimonia*, sometimes translated as happiness, but better rendered as flourishing. Flourishing is not an experience or steady state. Rather, it is a pattern of *activity* through



which a person enacts excellence not only in extraordinary actions, but in the daily activities of life. This ethical account focuses on what it is to live a rich and meaningful life by exercising human capacities such as reason, sociality, and creativity in the service of characteristically human goods such as knowledge, democracy, and justice.

Flourishing is seen as the ultimate human good because it is the only aim that is sought only for its own sake, not for the sake of any other end. A flourishing life is characterized by actions consistently and cumulatively undertaken for the sake of worthwhile ends within meaningful social bonds. Flourishing is not an episodic experience, but a matter of the way that one's life shapes up as a whole over time.

## Virtue

"The original Greek term for virtue was *arête*, best translated as excellence. Virtues are, simply put, human excellences or character strengths that make it possible for individuals to flourish as human beings" (Fowers, 2005, p. 4). Because flourishing is a matter of actively pursuing characteristically human goods such as knowledge and positive social relations, particular virtues such as honesty and friendship are called for. For example, the scientific pursuit of knowledge necessitates the virtue of honesty, because science involves one in a genuine search for the best ways to understand the phenomena of interest. Dishonesty about one's procedures or results is not merely an error. Rather, it is a kind of bad faith that is intrinsically contradictory to science because distorting or fabricating one's findings negates the very possibility of pursuing the most accurate account of a phenomenon. Scientists' honesty serves the good of expanding our knowledge and the only way to pursue this good is to be truthful about one's procedures and results.

Because the human good is seen differently in various historical cultures, there have been many different conceptions of virtue. Warrior societies favored martial virtues that promote soldierly prowess and victory, whereas religious communities have emphasized pietistic virtues that promote deeper relations with the divine. For this reason, there is no final formulation of the human good nor is there a definitive list of virtues. Although many authors have put forward various lists of virtues, no list has widespread acceptance or substantial evidence for its primacy. For this reason, virtue ethicists generally hold that part of the human good is the ongoing debate over what is best for humans.

Virtues are multidimensional characteristics that have considerable overlap with standard psychological topics. Having virtue involves a cognitive understanding of what is good and of what counts as virtuous. When individuals are drawn to particular goods (e.g., knowledge, democracy) they are spontaneously motivated to act in accordance with them. An enduring attraction to admirable aims creates a reliable disposition or habit of acting for their sake. In the best life, the dispositional, cognitive, emotional, and behavioral aspects of character strengths

are integrated seamlessly. This integration of knowledge and affect regarding how to act well is a very appealing aspect of virtue ethics. Individuals who have developed good character *want* to act ethically because they are attracted by what is good. This attraction to worthwhile goals elicits a desire to pursue them wholeheartedly rather than being conflicted between duty and desire. Disharmony of will and desire is an accepted aspect of many perspectives on ethics, but it is an indicator of incomplete character development in virtue ethics. Indeed, when one acts in the service of cherished ends and in ways one sees as praiseworthy, one takes pleasure in those activities. From this point of view, pleasure is not an adventitious pursuit in life, but an integral part of living well. For these reasons, virtue generally does not involve self-sacrifice or self-denial.

Aristotle (ca 330 BCE/1999) emphasized that “virtues are implanted in us neither by nature nor contrary to nature; we are by nature equipped with the ability to receive them, and habit brings this ability to completion and fulfillment” (p. 33). In contrast to humanistic theories, we cannot count on some innate goodness to give rise to excellence given favorable conditions. Cultivating virtue is a matter of a long series of choices to develop excellence actively in oneself. Virtues are obtained through developing reliable habits of thought, affect, and behavior. This generally involves observing individuals who exercise the virtue and practicing the virtue until it becomes second nature. Good habits of thought and emotion are fostered by developing a firm and consistent attachment to important human goods, which results in the desire to pursue those goods. Virtues are known as character strengths because they become characteristic of the person through the process of making them habitual. At best, virtuous action attains a significant degree of automaticity.

## Character and Character Types

Although specific virtues can be acquired and discussed independently to some extent, many virtue ethicists see character as substantially unified. The argument for unity of character is twofold. First, flourishing and excellence of character involve the ability to respond well to many situations. Situations of risk call for courage, circumstances involving human frailty call for compassion, conditions concerning distributing goods call for justice, and so forth. If an individual can only enact a subset of virtues, that individual will fall short in many situations and will be unable to act consistently in pursuit of what is good. Second, flourishing is a matter of how an individual’s life shapes up as a whole. Good character cannot be episodic because enacting virtue consistently across all life situations is necessary to have a flourishing life as a whole. Just as having a good day or a good year does not constitute a flourishing life, having one or two fine characteristics or acting well episodically does not mean that one has a good character.

The virtuous character may be best understood by contrasting it with the four other character types. Virtuous individuals have a clear vision of what is good and

admirable, and they pursue those goods consistently and gladly. A person of good character *wants* to act for the best, which manifests as a settled disposition to act virtuously and a harmony between desire and duty. This emotional harmony and spontaneous desire to act well are defining features of virtue.

The most common way to think about “acting morally” in both popular consciousness and in modern ethical theories is that one must follow a rationally derived course that is either contrary to one’s personal inclinations and feelings or at least independent of them. From a virtue ethics perspective, the conflict between moral will and desire is a defining feature of a pair of character types known as continent and incontinent. Individuals with these character types know how to act well, but their understanding of the best kind of action and their desire to follow through with admirable action are at odds with each other. Continent individuals are those who know how to act well and decide to do so, even though this decision is contrary to their desires. Typically, continent individuals have to struggle between what seems best and what they want to do. Their understanding of what is best generally triumphs over their desire, but it requires some effort to decide to act for the best, and this ambivalence is often manifest in the action. Individuals who know what they should do but frequently cannot bring themselves to do it are called incontinent persons. When their will to act well loses the struggle with less worthy desires, it is costly to these individuals because they frequently feel guilt, regret, or shame about their inability to act in the ways they think are fitting.

The vicious character refers to those who are characteristically greedy, deceitful, exploitive, self-indulgent, etc. The term *vicious* does not necessarily connote hostility or mean-spiritedness, simply that one consistently chooses to act ignobly. A key feature of character vice is that the individual feels entirely justified in their ignoble actions. This justification is not mere rationalization, but is based on a misguided sense of what is good. This erroneous vision of what is good is one of the key features that differentiates vicious from virtuous character. Vicious individuals pursue ends such as acquisitiveness, domination of others, and self-indulgence as goods in themselves. They do this by construing themselves and the world in a way that makes their actions seem appropriate and justified to them. For example, individuals who seek to dominate others may pride themselves on their hard-headed “recognition” that human life is nothing more than a struggle for power, a dog-eat-dog affair.

Individuals with beastly characters become enslaved to desires or habits that suppress or destroy their basic human capacities to reason, make choices, and engage in good relationships with others. Perhaps the best examples of beastliness are those who become so desperately addicted to a drug that all of their actions are oriented to serving their addiction. Theft from strangers or loved ones, prostitution, and myriad forms of deception or violence are deemed acceptable means to obtain the drug. Beastliness can also take forms such as an indiscriminate gluttony, a wanton tendency toward violence, uncontrollable gambling, and so forth. The key feature is the abandonment of one’s humanity.

## Practical Wisdom

One intriguing feature of virtue ethics is the nearly complete absence of rules for moral behavior. There is, of course, a general injunction to act virtuously, but virtue is not a matter of following rules. Rather, it requires cultivating excellence in character, from which fine and noble action will naturally ensue. Because the circumstances individuals encounter are endlessly variable, no set of rules or guidelines could provide enough direction to know how to act, and actors have to rely on their ability to choose wisely. In practical situations, the virtues require good judgment to know which traits are appropriate for a given situation and to know how to enact them, given the circumstances. The capacity to recognize the essentials of what we encounter and to respond well and fittingly to those circumstances is known as *phronesis*, often translated as practical wisdom, or judgment. According to Aristotle (ca 330 BCE/1999), practical wisdom is central: “it is impossible to be good in the full sense of the word without practical wisdom or to be a man of practical wisdom without moral excellence or virtue” (p. 172).

“In a nutshell, practical wisdom is the ability to make wise decisions about how to act in a specific situation” to pursue what is good (Fowers, 2005, p. 13). Practical wisdom begins with the ability to see what is important in the particular circumstances, to sort out what is central and what is peripheral so that one can respond to what is essential rather than being distracted by less important concerns. Wise individuals then deliberate about how best to pursue their overall sense of what is good in this particular situation. For example, a parent who is committed to teaching their child self-responsibility will respond to the child’s misbehavior in a way designed to increase responsibility rather than simply reacting angrily or punitively. Practical wisdom results in choosing an action that is appropriate to the specific situation that allows one to pursue the goods that are relevant to it.

As individuals pursue worthwhile goals in a given situation, they must decide whether their actions should be guided primarily by courage or modesty, generosity or justice or by some other virtue. In addition, they have to decide what would count as courageous or generous action in each instance. Aristotle famously describes virtue as the mean between excess and deficiency. For example, courage is the mean between rashness and cowardice. Practical wisdom is the capacity for recognizing which virtues are relevant in the circumstances and then where the mean is for each concrete situation.

SEE ALSO: ► Civility ► Eudaimonia ► Good life ► Well-being

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## Virtues

Blaine J. Fowers

*University of Miami*

There are many virtue traditions from which one can draw a concept of virtue and lists of virtues, including warrior cultures such as the Homeric Greeks, the Lakota tribe, and the Bushido code, philosophical sources such as Aristotle and Confucius, and religious traditions such as Christianity, Judaism, and Buddhism. Each of these traditions has a particular understanding of what it is to live a good life as a human, and its list of virtues are those character strengths that make it possible for a person to live in the best way as conceived by the tradition. Among warrior cultures, virtues related to martial prowess and honor will predominate, whereas in religious traditions, virtues that enhance worship of the divine are central. Although virtue catalogs and descriptions of individual virtues vary across sociohistorical settings, there is also a great deal of overlap and great potential for fruitful dialogue among virtue traditions.

It is important to distinguish between virtue and the virtues. The singular term *virtue* refers to the general concept whereas the plural *virtues* refers to specific personal strengths such as courage or honesty. It is vital to have a clear, systematic general conception of virtue within which specific virtues can be defined. Virtue can be defined as the overall constellation of virtues that make it possible to live the best kind of life. The term *character* is generally used synonymously with virtue and the term *character strength* is interchangeable with a specific virtue.

Contemporary virtue ethicists tend to follow Aristotle in conceptualizing virtue in terms of a mutually supportive composite of characteristics including an understanding of what is good, knowledge about virtue, consistent virtuous action, affective concordance with virtuous actions, and practical wisdom. Goods are valued ends such as democracy, knowledge, and good relationships. Because a virtuous individual is attracted to these goods, he or she will act spontaneously in an honest or generous manner because it will help to bring the desired goods into being. This attraction to what is good is a key part of virtue because it gives rise to a harmony between duty and desire, in contrast to the conflict between duty and desire found in other prominent Western ethical systems. Virtue ethicists emphasize that virtuous action is informed and shaped by knowledge and reason rather than simply being the result of a generous impulse, for example.

Although there is some debate on this point, this composite structure is generally taken to entail the understanding that virtue involves the demonstrable ability to enact a full range of virtues or that there is a unity to virtuous individuals'

character such that they act ethically across widely varying situations. The unity of virtue argument suggests that it would be inappropriate to attribute virtue to someone who could be honest but not generous or courageous but not just.

## Virtue Catalogs

In the earliest Western list of virtues, Socrates identified four virtues in Plato's *Republic*: courage; justice; temperance; and wisdom. Aristotle expanded this list and the concept of virtue dramatically in his *Nicomachean Ethics*, the first full text devoted to ethics in the Western world. Aristotle added virtues such as liberality, proper pride, honesty, ready wit, and friendship. In addition, he emphasized the necessity of *phronesis* or practical wisdom in enacting virtue: "it is impossible to be good in the full sense of the word without practical wisdom or to be a man of practical wisdom without moral excellence or virtue" (Aristotle, ca 330 BCE/1999, p. 172). Thomas Aquinas incorporated Socrates' four virtues and called them the four cardinal virtues. He added three theological virtues: faith; hope; and charity. For Aquinas, "God Himself is the very object of these [theological] virtues" (ca 1265 CE/1966). Confucian virtues include reverence (*li*), love within the family (*hsiao*), righteousness (*yi*), honesty (*xin*), benevolence (*jen*), and loyalty to the state (*chung*).

These and other catalogs of the virtues often have a good deal in common, but it is obvious that they differ substantially as well. Peterson and Seligman (2004) set out to "reclaim the study of character and virtue as legitimate psychological topics" (p. 3) by examining "dozens of inventories of virtues and strengths" (p. 15) from a wide variety of sources. These authors hoped to create a comprehensive classification system for virtue. Their system contains six virtues (courage, justice, humanity, temperance, transcendence, and wisdom) with 24 character strengths distributed within these virtues. It is impossible to pass judgment on this classification system at this time, but it has been greeted with both acclaim and criticism, rendering it just as ambiguous in its general acceptability as all the other virtue catalogs.

The lesson from these catalogs is that no system of virtue has obtained universal acceptance or finality. Each catalog represents and expresses a particular outlook on what is important in human life, and these outlooks vary across time, culture, and the standpoint of their authors. Virtue catalogs are developed and reinterpreted according to a society's need for a coherent account of good character and of how to live well. Although the domain of human life is quite variable, it is not infinitely so. For this reason, there are significant commonalities across virtue catalogs, with virtues such as courage, honesty, and justice appearing frequently. These commonalities suggest that it is possible to recognize and meaningfully discuss some virtues across cultural and historical contexts. This is not to suggest that the differences in concepts of virtue are trivial, only that dialogue about them can be quite meaningful and enlightening.

General statements about particular virtues are complex because the enactment of virtues is not only relative to a worldview, but also strongly situation dependent. Aristotle famously described virtue as the mean between deficiency and excess. For example, generosity is defined in contrast to the deficiency of miserliness and the excess of profligacy. Recognizing the proper way to be generous is not simply splitting the difference between the extremes, but attending to what generosity requires in a particular situation. Decisions about what constitutes a generous gift are entirely dependent on the nature of the occasion, the kind of relationship one has, the means at one's disposal, and other related factors. Misreading any of them can render a gift miserly or profligate. Practical wisdom is the requisite capacity for reading situations well and understanding what the circumstances call for. This key virtue is delineated first among the frequently cited virtues because contemporary virtue ethicists generally agree with Aristotle that it is a necessary element in all other virtues.

## The Virtues

### Practical Wisdom

Virtue ethics is based on the premise that there is far too much variability in the ethical life of human beings to ever hope to formalize ethics into a set of rules or principles of action that can provide unequivocal guidance about how to act. Therefore,

any set of rules requires an extensive array of exceptions, caveats, and qualifications to make it flexible enough to be responsive to the endless variation of daily life. These qualifications would have to be qualified further, leading to an infinite regress. (Fowers, 2005, p. 13)

In the absence of an algorithm for life, virtue ethics recommends learning to recognize what is good, cultivating a good character, and exercising judgment or practical wisdom as the keys for deciding how best to act, and living the best kind of life.

Practical wisdom is the ability to recognize what is important or at stake in a situation, to see how one can pursue important goods in that situation, and to decide which actions will be appropriate both to the situation and to promoting what is good. In sizing up situations, individuals with practical wisdom are able to differentiate between what is central and what is peripheral. They zero in on the important features of the situation and avoid being distracted by secondary concerns.

A clear-sighted appraisal of the circumstances allows these individuals to decide which of the virtues are called for. A situation in which important goods are threatened requires courage; one in which the distribution of resources,

duties, or rights are at issue demands justice. Some situations will require more than one virtue and it takes wisdom to recognize how to appropriately harmonize them in action. As noted above, practical wisdom also guides the individual in knowing what constitutes a virtue in a particular situation. That is, given a particular context, how much risk taking constitutes courage or how much giving constitutes generosity? Being able to answer these questions is vital because, for example, one can err through excess or deficiency (i.e., by risking too much or risking too little given what is at stake). The parameters of practical wisdom will be exemplified in descriptions of each virtue below, highlighting the centrality of practical wisdom for practicing virtue.

## Courage

Courage is a frequently recognized virtue and it is called for when an important good is at risk. Situations that involve risk-taking for the sake of defending something important are ubiquitous in human life. Such situations might involve natural disaster, war, crime, class conflict, exploitation, among other threats. Various circumstances call for different types of risk-taking, including physical, political, social, or psychological risks. In spite of this variability of context and form, a common requirement for courage is evident, and acting courageously means taking risks that are commensurate with both the good that one wants to protect and the situation. To name a few examples, fire fighters put their physical safety on the line for public safety; attorneys take publicly reviled dependents' cases to serve the cause of justice; and individuals and groups confront powerful exploiters for the sake of human rights or the environment.

Courageously taking risks means that one is protecting an important good (e.g., public safety), but doing so in a way that is fitting for the situation. It would be foolish for a firefighter to rush into a burning building to salvage mere property, but if lives were at stake, such a risk might be appropriate. Similarly, if there were no hope of saving someone, it would be rash to risk one's life for an unrealizable rescue. In contrast, a refusal to take reasonable risks to protect something of significant value would be cowardly.

## Justice

Justice is a ubiquitous concern in human society. In North Atlantic societies, there is a tendency to see justice primarily as matters of equal treatment before the law, and of following correct procedures. There is a lot to be said for general equality and procedural justice, but there is also great latitude for interpretation and action in the context of the law, leading to significant risk that justice may be mis-carried through excessive attention to "the letter of the law" or misapplication or outright misuse of the law. Moreover, in the vast majority of human interactions, the law is, at most, a distant consideration. Matters of justice in everyday life are decided more on an ethical or customary basis than a legal one. All of this



suggests that it is important for individuals to cultivate justice as a virtue because the just application of the law and justice in day-to-day relating require a personal commitment to justice.

The virtue of justice is the ability to properly assign resources, rewards, burdens, duties, and rights. From a virtue perspective, this proper assignment has to do with what a person or group deserves or is owed. In some cases, everyone deserves equal treatment, as in allowing equal opportunity for achievement, jobs, equal pay for equal work, and so forth. In other cases, merit will guide the just assignment of benefits and burdens, as in giving awards for outstanding achievement, giving greater responsibility to those capable of shouldering it, or giving extra resources or assistance to those who suffer through no fault of their own.

The virtue of justice is complex in many ways. Most importantly, it is one of the virtues that is most sensitive to its context because what is seen as the proper assignment of benefits and burdens depends strongly on the political and economic environment. A just distribution is seen differently in theocratic, aristocratic, and democratic political systems. Similarly, justice is cast in different terms in communist, socialist, and capitalist economies. Variations in what individuals and groups deserve will inform different accounts of justice and their appropriate actions.

In spite of these variations, the virtue of justice can be understood in contrast to the vices of excess and deficiency in the particular political and economic context. Excess occurs when one aggrandizes too much to oneself vis à vis one's desert and deficiency when one allows oneself to be disadvantaged relative to one's desert. Moreover, when individuals participate in decisions of desert regarding others, just individuals will work toward a proper assignment of benefit and burden among their fellows. Here, as elsewhere, practical wisdom is indispensable in identifying the proper distribution of resources and expectations among individuals and groups and understanding how to bring that about.

## Honesty

The virtue of honesty is necessary to facilitate communication and cooperation in joint activities in the service of important goods. One of the most obvious goods that honesty facilitates is good personal relationships, but it is also central to the pursuit of justice as a good, as well as the pursuit of knowledge. Dishonesty in any of these pursuits seriously undermines the endeavor itself. For example, planting false evidence or misleading a judge or jury may lead to or avoid a conviction, but it undermines the pursuit of justice, which is devoted to assigning culpability for wrong-doing correctly.

Honesty is found in the mean between excessive candor and deficient candor. Excessive candor includes well-known instances such as telling a murderer where to find the intended victim, making overly candid and needlessly hurtful statements about others' appearance, and so forth. Deficient candor can occur through commission (e.g., lying) or omission (e.g., misleading or withholding information). In all cases, the proper level of candor is largely determined by the

situation and the goods being pursued. In scientific endeavors, rather complete candor is appropriate regarding the methods, analyses, and discussion, but still limited by considerations such as redundancy and relevance. In polite conversation among acquaintances, rather less candor is called for because the goods of this kind of interchange have as much to do with social convention and amity as with truth.

## Generosity

Although the term *generosity* is less commonly used than other virtue terms, it can encompass several virtues. Aristotle used the term *liberality*, Aquinas named it *charity*, and Confucius called it *benevolence*. The virtue of generosity involves situations in which one group or individual gives to another. Generous individuals give “to the right person, to the right extent, at the right time, for the right reason, and in the right way” (Aristotle, ca. 330 BCE/1999, p. 50). Generosity can involve gifts, time, disaster relief, forgiveness, kindness, and so forth.

Generosity is defined as giving that goes beyond what is required by justice or friendship and that conduces to the recipient’s good. Giving fails to be generous when it does not contribute to an individual’s overall flourishing. For example, some giving has the effect of maintaining the dependence of the recipient on the giver rather than helping the recipient to become more capable. In other cases, offering admission to an applicant who is ill-prepared for a degree program or offering a job to someone who is not capable of succeeding at it would not be doing those individuals a kindness.

Like the other virtues, generosity is also clarified by recognizing the excess (profligacy) and deficiency (miserliness) associated with it. Circumstances help to define what counts as generosity, including the occasion, the relationship between the giver and receiver, and social custom. A gift that would be viewed as stingy in one circumstance might be seen as excessive in another. Practical wisdom serves to guide the giver in recognizing the appropriate level and kind of gift taking all these factors into account.

## Friendship

Virtue ethics differs from modern approaches to ethics in that it deals more directly with the intricacies of relational life. This is particularly evident in Aristotle, who devoted two of the 10 books in the *Nicomachean Ethics* to friendship. He saw friendship as an essential element of a flourishing life, reasoning that living well would require close, cooperative relationships with others oriented to mutually desired goods. “No one would choose to have all good things by himself. . . . It follows that the happy [flourishing] man needs friends” (Aristotle, ca 330 BCE/1999, p. 264). He is making the important claim that the best kind of life must include friends because humans need partners in their activities, mutual support, and well-wishing to flourish.

For Aristotle, friendship is more than an affective bond. It encompasses relationships of many types, including the peer relationships that we generally consider friendship, as well as family and business relationships. Friendship is marked by partiality toward one's friend: wanting the best for him or her and taking pleasure in his or her happiness and well-being. This partiality contrasts sharply with modern ethical theories that emphasize *impartiality* as a key element in ethical action. Friendship also involves individuals in joint activities which the friends find worthwhile and pleasant.

Aristotle described three kinds of friendship. The first is based on pleasure, and pleasure friends' relationships are a matter of enjoying one another's company and shared activities. The second is based on utility. Utility friends assist one another in various ways and the relationship is primarily devoted to assisting each other in areas like business or politics. The third is called character friendship and it is based on recognizing and valuing the quality of the friend's character and on sharing the pursuit of worthwhile ends such as justice, knowledge, art, and other goods with the friend. Aristotle thought that all three forms of friendship were valuable, but that the third form of friendship was the noblest and most enduring because character and the pursuit of worthwhile ends are more stable than pleasure or utility. Character friends spend time together doing the things they love, and affiliating with people who have good character helps one to improve oneself.

Although there is some disagreement about the degree to which character strengths can be understood and practiced independently, it is clear that the best kind of life will be one that is characterized by consistently acting well about things that matter in a wide variety of situations. It is likely that some version of the virtues described in this entry will have a place in most virtue catalogs because they deal with key aspects of human life. Nevertheless, the virtues discussed above should be seen as illustrative rather than exhaustive. The various catalogs of the virtues indicate the complexity of human life by recommending an array of virtues. Virtue ethicists emphasize that cultivating the character strengths that are necessary to pursue the goods identified by one's tradition is the best way to live well according to that tradition. Empirical research on and the conceptual development of virtues in psychology are in their infancy, but there is a growing body of evidence that virtues do contribute substantially to human flourishing, indicating that this promising area of inquiry merits ongoing study.

SEE ALSO: ► Virtue ethics

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## Vitality

Netta Weinstein and Richard M. Ryan  
*University of Rochester*

*Vitality* refers to a state of organismic well-being in which individuals feel energetic, alert, and fully alive. Various researchers have provided measures of this concept. Richard Ryan and his colleagues have assessed *subjective vitality* in terms of dynamic energy that emanates from the self and is relatively free from tenseness, jitteriness, or anger. For them, vitality represents a feeling of aliveness that is affected by both physical (e.g., health, fatigue) and psychological conditions. Robert Thayer described a similar construct, termed *calm energy*, which requires the experience of liveliness that is free of tension and pressure. As such, vitality is associated with a number of positive emotions, including feelings of joy, interest, and enthusiasm as well as physical health and improved physical functioning. Although vitality relates to positive affect, the state is differentiated from happiness or subjective well-being in that it consists of higher levels of experienced activation or energy as well as positive affect.

In philosophical and religious texts, vitality is described as essential for creativity and growth. Ancient Chinese and Japanese traditions respectively refer to vital energy as *chi* or *Ki*, and cite it as the source of life, creativity, and organismic health. Balinese healers describe *bayu* as a vital force that underlies growth and resilience. In the Western tradition, the concept of vitality was central to Freud's economic model. Freud proposed that people have a limited supply of psychic energy essential for functioning. Intrapsychic conflict depletes available resources of ego energy, leading to lower levels of perceived vitality. When an individual is self-congruent and nondefensive, he or she may experience greater feelings of aliveness and energy. In line with this idea, researchers such as Ryan, Ken Sheldon, Tim Kasser, and Robert Emmons have found that integrated, self-congruent individuals experience higher vitality. State levels of vitality may also be experienced when one acts autonomously or in a self-congruent fashion, or experiences a sense of competence. Furthermore, individuals experience greater vitality when engaging in intrinsic pursuits. Experimental data presented by Glen Nix and his colleagues show that succeeding at an activity for which one feels pressured leads to increased happiness but not vitality, but that succeeding at an activity autonomously undertaken leads to increases in both. Thayer's lab also shows that ego involvement has similar effects to those of pressure, ultimately leading to greater losses in vitality. Research by Harry Reis and colleagues provides further support for the importance

of psychological well-being in freeing up vitalizing energy, showing that on days in which individuals experience greater autonomy, relatedness to others, and competence, they also experienced greater vitality. Along similar lines, Roy Baumeister and his colleagues have viewed energy as a limited resource, and emphasized the role of self-control in depleting this resource. Baumeister and his colleagues have shown that extending self-control in an effort to attain difficult goals depletes energy resources, effectively reducing levels of vitality.

Yet another view of vitality was provided by Hans Selye, who pioneered stress research. He described *adaptation energy* as a limited resource required for resilience to stress. Such energy facilitates one's ability to regulate emotions and to cope with stressful life events. Stressful life events, in turn, have the capacity to deplete individuals' levels of vitality. Stressful life events are one of a number of circumstances of behaviors that can thwart vitality.

Researchers such as Ryan and Thayer find that physical habits also have an impact; Individuals who have poor physical health and who smoke or have poor nutrition experience less vitality, while individuals who engage in physical exercise experience higher vitality. Ancient Eastern practices such as tai chi, yoga, and meditation can also lead to greater experiences of vitality. Vitality has also been associated with better psychological and cognitive functioning. Studies show that vitality contributes to enhanced problem-solving, concentration, and performance, and greater readiness for new challenges.

Presently, a number of scales measure vitality. As noted, Robert Thayer's Activation-Deactivation Adjective Check List (AD ACL) measures a state of calm energy, which in contrast to tense energy, reflects a feeling of vigor and positive energy. McNair and colleagues' Profile of Mood States (POMS) assesses a state called *vigor* that reflects positive energized mood. Also, the Emotional Vitality Scale developed by Pennix and colleagues measures an energy state comprised of personal mastery, happiness, and decreased anxious and depressive symptoms. Finally and most recently, Ryan and Frederick developed the Subjective Vitality Scale (SVS), which assesses vitality with items such as "I feel alive and vital," and "I feel energized." These measures reflect the diversity in thought and the continuing interest in vitality as a central measure of well-being. This interest arises from deep roots founding the discussion of vitality, as well as the intimate relation of this dynamic construct with choices, motivations, and adaptive functioning.

From the present research emerge a number of notable directions for future studies. A burgeoning subset of vitality research has recently focused on identifying factors that effectively enhance vitality. In particular, mindful states and contact with nature are promising to be effective vitalizing interventions. Future studies may explore these and other interventions that enhance the experience of vitality. Additionally, the body of research utilizes self-reported and behavioral indicators of vitality. To understand the nature of vitality, it will be fruitful also to examine physiological processes that contribute to vitality and their interaction with the psychological factors reviewed. Finally, the concept of vitality appears to have significance in varied cultures and contexts, but few studies have examined

whether there are cultural or developmental differences in what fosters vitality. Future studies should examine cultural and age-related differences in vitality, including different subjective experience and expression.

SEE ALSO: ► Hedonics ► Positive affectivity ► Vigor ► Well-being

## Vocation

Christopher A. Ebberwein

*Psychology Consultants, Wichita, Kansas*

*Vocation*, which comes from the Latin word *vocare*, meaning “to call”, is best understood as one’s *calling*, or motivation, to participate meaningfully in the world. Traditionally understood as a calling from God, vocation maintains this meaning (e.g., a vocation to priesthood or religious life), but is more commonly understood today as one’s particular place in the world of work. The spiritual roots of the word vocation are found in the implication that one’s vocation *fits* the person’s unique nature – that it presents an opportunity to implement one’s meaning or purpose in life. Richard Bolles, author of a widely popular career change manual, points out that vocation is synonymous with the word *mission*. Most people, at some point in their lives, wonder about their *mission in life*. This internal pull toward an opportunity to contribute something lasting, or toward a meaning greater than the self, seems to distinguish vocation from simply performing a job. For this reason, vocation inherently includes one’s calling to work that is both paid and unpaid. For instance, a woman who works a difficult low status job for no reason other than the income might describe her vocation as mother or grandmother, with her meaning and her contribution being the love and support of family. Individuals seeking a vocation can be heard saying things like the following: “I want more than a paycheck;” “I want to create something;” “I want to make a difference.” They want a vocation. A person implements his or her vocation by answering the call, which requires an understanding of both the self and the calling. Examining theories of vocational psychology illustrates important factors an individual faces in order to gain this dual understanding.

Though job placement and vocational guidance emerged along with factories during the late 1800s, the study of vocational choice took formal shape in the early 1900s when Frank Parsons defined a three-part method of choosing a vocation to include: an understanding of one’s self; an understanding of the nature of work available to the individual; and the reconciling of these two groups of information into a fitting decision. Most view Parsons’ model as the beginning of the field of vocational psychology, which devotes part of its research and practice to helping individuals respond to their calling in meaningful ways that allow them to be satisfied, and ideally fulfilled. His model of using information about self and occupations as the basis for vocational decision-making remains relevant today, with great

advancements through the work of researchers like John L. Holland, René Dawis, Lloyd Lofquist, and Linda Gottfredson. Their theories emphasize different aspects of *vocational choice* and illustrate the many implications that can be drawn and studied from Parsons' model.

People who find their calling know their interests and find places to express them. According to Holland's theory, patterns of vocational interests demonstrate an individual's primary personality type. Along with work environments, the personality can be understood as fitting one or more of six descriptive themes (realistic, investigative, artistic, social, enterprising, and conventional). Personal satisfaction and effectiveness within this theory depend on the degree of fit, or congruence, between the personality type and the type of environment attributed to the vocation. This theory has led to widely used scales and inventories that aid with vocational decision-making.

Implementing a vocation allows an individual to meet both their personal needs and the needs of the environment in which they work. Dawis and Lofquist's important concept of correspondence reflects the ideal interaction between the needs and aspirations of an employee and the needs of an employer. The quality of the vocational decision relies on both the ability of the environment to match the individual's aspirations and the ability of the individual to contribute to the goals of the organization.

Not uncommonly, people take on undue pressure to find the *one perfect match*, with the fear that anything less will lead to disappointment or unhappiness. Vocation points to one's unique and meaningful contribution more than it points to a specific job title. Expressing one's self genuinely and authentically does not have to mean finding *the one right* vocation, but might result in a number of possible vocations. The natural born teacher might find himself at the head of a 1st grade classroom, a member of a distinguished faculty, a corporate trainer, and/or the first and best teacher of his own children. An individual might choose one of these vocations for a lifetime, might transition from one to another over time, or might implement more than one at a time, as is the case for most mothers and fathers, who see parenthood as a calling in addition to that which they pursue in their work lives.

People answer the call within a unique life context. In addition to vocational choice theory, another major line of research known as career development theory emphasizes developmental factors and attempts to understand how vocation interacts with other facets of a person's life. No one furthered this line of research more than Donald Super, whose *lifespan, life-space* theory of career development calls attention to the fact that a vocation takes place within a life. Satisfaction depends on how well the person implements his or her self-concept at different stages in life across some number of available roles, including but not limited to one's vocation.

Some period of imagining a preferred calling often ends in compromise. Linda Gottfredson's work contains important elements of both vocational choice theory and career development theory. It highlights an ongoing process of decision-making within the individual's social context. Factors such as social class

and gender stereotypes contribute to and limit a person's aspirations over time. Individuals maintain some vocational options and eliminate others depending on how well the options match his or her view of self. As the person encounters the world at large, he or she gives up some of the preferred occupations due to real and perceived external factors that limit access to that type of work. This compromise can range from hardly noticeable to highly distressing, depending on the degree to which alternatives allow implementation of the self-concept. When the only accessible options result in a great mismatch between the vocation and the person's self-concept, the distress is at its worst.

Sometimes a calling is beyond reach. Importantly, the developmental theorists' emphasis on life context demonstrates some factors that limit one's vocational options. Certain factors affect whether a person ever aspires to a particular vocation and other factors force a choice that is less desired at the time of decision-making. Some limiting factors include characteristics or traits such as physical stature, intelligence, particular skill-sets, or personal values. These limiting factors are important and, though disappointing at times, aid in the choice of a realistic vocation. Every person encounters factors that make some vocations realistic and others unrealistic. Other limiting factors are not inevitable, but have been constructed by society over time and have served often to unfairly discriminate against various groups of people. Researchers such as Nancy Betz have shown that women often underestimate their ability to succeed in certain vocations compared to men, possibly due to customary role divisions between men and women. This belief in one's ability to succeed, known as self-efficacy, significantly affects one's perceived options and subsequently one's choice of vocation. Similarly, disability, membership in a particular ethnic group, religion or social class, and sexual orientation often have served to limit the aspirations of members of these groups. At times these limits have resulted from subtle, unspoken patterns among groups, and at other times they have resulted from overt discrimination. Poverty dramatically affects the pursuit of paid work as a vocation, both in the ways that it limits experiences that might otherwise contribute to vocational development, and in the simple fact that survival needs take precedence over needs for self-fulfillment.

The vocation one pursues often reflects priorities that extend beyond his work life. As with any human endeavor, people view and approach vocation differently based on a number of personal differences. Such differences might arise based on gender and cultural influences. Within groups, differences might be based on social class, level of education, values particular to a family, religious affiliation, or genetic endowment. For instance, choice of vocation for some individuals will depend heavily on the family's needs and preferences. For others, individual preferences take precedence over the family.

When answering the call, know that change is inevitable. In a study Super conceptualized the successful completion of age-appropriate vocational tasks across the life span as *vocational maturity*, but this construct fell short of explaining how individuals should adjust when unexpected change interrupts normally expected



developmental tasks. This shortcoming became apparent with the rapid change in the world of work in the 1970s and 1980s, when significant change in one's vocational life became the expectation, not the exception. Super himself suggested that a greater understanding of adult transition was needed. In recent years, Mark Savickas has updated Super's theory and emphasizes *career adaptability* over vocational maturity. Adaptability, or one's readiness to cope with internal and external change in order to implement one's self-concept, applies across the lifespan. It includes an individual's degree of concern, control, confidence, and curiosity for tasks that contribute to vocational development. With an understanding that much of what contributes to a person's vocational choice is subtle and intuitive – even outside of awareness – Tom Krieshok and colleagues are studying the component of career adaptability termed *engagement*, which naturally expands the individual's fund of vocational information and subsequently his or her perceived options, through direct experiences. Such experiences can include planned activities such as observing others at work or volunteering, or they can include those encounters that John Krumboltz has coined *planned happenstance*, the kinds of enriching experiences that arise from a willingness to see unplanned events as potential opportunities for learning about oneself or the vocation. Adaptability, engagement, and openness to planned happenstance promote a ready stance toward an ever-changing world, and using these skills allows the individual to answer and find meaning in multiple callings across a lifetime.

SEE ALSO: ► Adaptability ► Calling ► Career development  
► Self-efficacy



## **Watson, John B.**

Janice E. Jones

*Cardinal Stritch University*

John Broadus Watson (1878–1958) was an American psychologist whose work greatly influenced the behaviorism movement. Behaviorism is the field of psychological study that looks at what we do rather than how we think or feel. This was far removed from the Freudian school of thought that examined the unconscious mind and that favored introspection. John B. Watson's work influenced B. F. Skinner's research on operant conditioning and also had a major influence on behavior therapy.

Early in his career, John B. Watson studied behavior using animals. He progressed to studying human behavior and began to research emotional reactions. The Little Albert experiment, which could be called one of his most famous experiments, involved his ideas that people have three emotional reactions, those of love, rage and fear. He began his Little Albert Experiment on children at Johns Hopkins University. This involved specifically one little boy called Albert. Watson used classical conditioning to create fear in the little boy by showing Albert a white rat while simultaneously creating a loud, sudden noise. This research procedure created fear in Albert by making him associate the white rat with the loud, scary noise. Watson progressed from the white rat to larger and seemingly scarier animals with the children. Archival film footage of John B. Watson himself dressed in a Santa mask with a white flowing beard shows the viewer how scared the child was as he made the connection between the fur of the animal and the beard on the mask. These findings indicate that classical conditioning had taught people to transfer the fear from the loud noise that was associated with fur to other furry or hairy things. The theory indicated that people generalize their fear

and is indicative of how people react to their environment through conditioned responses.

Although John B. Watson was the president of the American Psychological Association in 1915, he did not have a lengthy career in academia. He left the field by 1920 and entered the world of advertising where he became a vice president in a large advertising firm. Although he was in a different field, he continued to publish some psychological works.

SEE ALSO: ► Entrepreneurial behavior ► Positive organizational behavior

## **Well-Being**

Matthew W. Gallagher  
*University of Kansas*

### **Introduction**

The scientific study of well-being has dramatically expanded in recent years. Although as early as 1948 the World Health Organization stated that mental health is more than the absence of mental illness, it was not until recently that psychologists began to systematically study the causes, correlates, and consequences of flourishing mental health and states of well-being. Hedonistic and eudaimonic traditions in well-being research have evolved from different philosophical and theoretical roots, yet modern day hedonistic (subjective / emotional) and eudaimonic (psychological and social) aspects of well-being appear to be closely related components of psychological functioning. Although these models have previously been presented as competing alternatives, recent theoretical and empirical work has focused on how these three theories and components of well-being complement one another and can be integrated into comprehensive models of flourishing mental health.

### **Hedonic Well-Being**

To date, the hedonic model of well-being has been the most extensively studied. Hedonic well-being is also commonly referred to as subjective or emotional well-being or happiness. This research tradition was pioneered by Ed Diener, whose seminal review paper in 1984 on subjective well-being proposed a model of well-being focusing on an individual's cognitive and affective evaluations of his or her life. More specifically, Diener and his colleagues have defined hedonic (or subjective) well-being as the frequent experience of pleasant emotions and moods, the infrequent experience of negative emotions and moods, and high

levels of self-reported life satisfaction. This model of well-being is an extension of the philosophy of hedonism, which identified the pursuit of pleasure and avoidance of pain as the primary goals in life, and is predicated on the belief that individuals are the best judges of their happiness or well-being. Decades of research provide support for hedonic well-being as a reliable and valid conceptualization of well-being.

## Eudaimonic Well-Being

The eudaimonic tradition of well-being focuses on the aspects of human functioning that promote and reflect the pursuit of meaningful life goals. Exemplifying this tradition, Carol Ryff and colleagues at the University of Wisconsin have developed a model of eudaimonic well-being that is intended to provide a holistic and theoretically grounded model of positive functioning. Specifically, Ryff and colleagues have identified six related but distinct factors that are proposed to encompass the eudaimonic idea: autonomy; environmental mastery; personal growth; positive relations with others; purpose in life; and self-acceptance. Individuals high in these aspects of well-being are independent and primarily driven by their own standards (autonomy), able to effectively identify and pursue external opportunities (environmental mastery), continually looking for opportunities to grow and develop (personal growth), engaged in mutually satisfying, warm, and trusting relationships (positive relations with others), able to identify and pursue meaningful goals (purpose in life), and have a positive attitude about both their personality and self (self-acceptance). This model is an extension of the Aristotelian philosophical tradition, which identified the pursuit of one's "daemon," or true self, as the ultimate purpose in life. Recent factor analytic research supports Ryff's model of eudaimonic well-being and the proposed theoretical distinctions between the hedonic and eudaimonic aspects of well-being.

Sociologist Corey Keyes of Emory University has argued that the failure to consider the importance of an individual's social condition and relationship reflects an intrapersonal bias in psychological research and has developed a model of social well-being that draws upon classical sociology. Whereas Ryff's model of psychological well-being focuses on primarily private phenomena that reflect the challenges encountered by adults in their private lives, Keyes' model of social well-being focuses on primarily public phenomena that reflect whether individuals are flourishing in their social lives. Specifically, social well-being consists of five factors that represent the extent to which individuals are overcoming social challenges and are functioning well in their social world. The five factors include social acceptance, social actualization, social coherence, social contribution and social integration. Individuals high in these aspects of well-being are comfortable with and have favorable views of others (social acceptance), believe that other individuals and the institutions of society are helping them reach their full potential (social actualization), perceive order and meaning in their relationships and society

(social coherence), believe themselves to be a valuable and appreciated member of society (social contribution), and feel as if they are united with and supported by other members of their community (social integration). Social well-being is therefore an extension of the eudaimonic tradition of well-being from the intra-personal focus of Ryff's model to the interpersonal realm. Recent factor analytic research using nationally representative samples of American adults supported Keyes' theory of well-being, as well as the distinctions between the components of social well-being and the components of hedonic and eudaimonic well-being.

## **Integrated Models of Well-Being**

Researchers studying well-being have recently begun to explore the potential for integrating the theories and components of hedonic, psychological, and social well-being into a comprehensive model of flourishing mental health. The potential for integrating these three models was first proposed and empirically examined by Corey Keyes. More recently, we have used confirmatory factor analysis to examine the latent structure of well-being in large samples of American adults. This empirical work provided support for the theoretical models of hedonic, psychological, and social well-being as distinct latent constructs, and demonstrated that these three models and the fourteen factors of well-being could be successfully integrated into a hierarchical structure of well-being. This integrated model of well-being maintains the theoretical distinctions of well-being, while simultaneously demonstrating that these models and components are strongly related to one another.

## **Categorical Models of Well-Being**

In addition to exploring the various dimensions of well-being, researchers have recently begun to examine the utility of categorical models of well-being that distinguish between different levels of positive mental health. Two categorical models of well-being have been developed in recent years and found to have preliminary empirical support. The first was developed by Barbara Fredrickson and colleagues and focuses on the ratio of positive to negative emotions that individuals experience. Fredrickson's research indicates that a ratio of more than three positive emotions for each negative emotion is indicative of flourishing mental health, and therefore that these affect ratios can be used to diagnose levels of well-being. The second categorical model of well-being was developed by Corey Keyes. This model distinguishes between flourishing, moderate, and languishing levels of mental health based upon levels of the fourteen factors of well-being that comprise the hedonic, eudaimonic, and social theories of well-being. Although more research examining both of these models is needed, these theories provide promising methods to distinguish between the presence or absence of mental health

in a manner similar to how the DSM-IV distinguishes between the presence or absence of mental illness.

## **Predicting Well-Being**

One question that is often raised about well-being is to what extent do higher levels of well-being simply reflect life circumstances such as age or income. Surprisingly, these factors appear to determine only a modest amount of individuals' levels of well-being. A recent review paper by Lyubomirsky and colleagues indicated that demographic variables and life circumstances determine roughly 10 percent of the variance in individual levels of hedonic well-being. This review paper also reviewed research from twin studies, and concluded that roughly half of the variance in hedonic well-being can be explained by genetic factors. Fortunately, the remaining 40 percent of the variance in individuals' levels of well-being appears to be dependent on intentional activities, and is therefore subject to change. Psychological factors that appear to be particularly important in promoting adaptive intentional activities include hope, curiosity, optimism, and gratitude.

## **Benefits of Well-Being**

In addition to examining important predictors of well-being, researchers have recently begun to explore the benefits of high levels of well-being. In particular, the Midlife Development in the United States (MIDUS) studies have provided an unprecedented amount of information about the psychological and social functioning of American adults. The results of the first MIDUS survey demonstrated that Americans who report having flourishing mental health miss fewer days of work, are less likely to suffer from a diagnosable mental illness, report more intimate relationships, have fewer chronic physical diseases, have less trouble sleeping, and generally have better psychosocial functioning than individuals who report moderate or low levels of mental health. A particularly noteworthy finding is that well-being and mental illness appear to be independent risk factors for the development of cardiovascular disease. Recent review papers have also demonstrated that various aspects of well-being have robust effects on important life outcomes. The most comprehensive of these reviews was conducted by Sonja Lyubomirsky, Laura King, and Ed Diener. This review demonstrated across a variety of important life domains (e.g., work, family, friendships, and health) that individuals who report higher levels of happiness or well-being report improved outcomes in each of the life domains. Together the MIDUS data and the Lyubomirsky et al., review provide promising evidence that, beyond feeling good, high levels of well-being promote positive outcomes in a variety of domains.

## Future Directions

Although the scientific study of well-being has made great progress in recent years, there are many areas in which additional research is needed. First, additional research is needed to determine the validity of the hedonic, eudaimonic, social, and integrated models of well-being. These models have been supported by promising empirical work to date, but it is likely that the future research will lead to additional theoretical refinements that could help us to better articulate the latent nature of well-being. Second, these models of well-being need to be studied in more diverse samples to clarify how ethnicity, gender, age, socioeconomic status and other demographic variables influence the various aspects of well-being. Finally, perhaps the most important area of future research will be longitudinal research that could help us better understand if and when lasting gains in well-being can be achieved. Historically, well-being researchers have often concluded that individuals are stuck on a “hedonic treadmill” that inevitably causes us to revert to a primarily genetically determined level of well-being. More recently, Lyubomirsky and colleagues have challenged this theory and suggested that as much as 40 percent of individual levels of well-being can be determined by intentional activities. Unfortunately, existing empirical research has not adequately examined this hypothesis and the potential for change. Future research examining individual trajectories and pathways to well-being could therefore help us to better understand how to promote and protect well-being.

SEE ALSO: ► Happiness ► Global well-being ► Carol Ryff

## Well-Being Therapy

Giovanni A. Fava and Chiara Ruini

*University of Bologna, Italy*

Well-being therapy (WBT) is a new psychotherapeutic strategy with the aim of enhancing psychological well-being. It was originally applied and validated in the residual phase of mood and anxiety disorders but its efficacy has also been extended to the prevention of relapse in recurrent depression; to the loss of anti-depressant efficacy during maintenance pharmacotherapy in recurrent depression; and recently to the treatment of posttraumatic stress disorder and of generalized anxiety disorder. Well-being therapy is based on Ryff’s multidimensional model of psychological well-being, encompassing six dimensions: autonomy; personal growth; environmental mastery; purpose in life; positive relations; and self-acceptance. This model was selected on the basis of its easy applicability to clinical populations; in fact it can be used to describe specific

impairments of patients with affective disorders and calls for behavioral and psychological modifications in order to reach optimal human functioning. The goal of WBT is to improve the patients' levels of psychological well-being according to these six dimensions.

## Structure of Well-Being Therapy

Well-being therapy is a short-term psychotherapeutic strategy, that extends over 8 sessions, which may take place every week or every other week. The duration of each session is usually in the range of 30 to 50 minutes. It is a technique which emphasizes self-observation, with the use of a structured diary, and interaction between patient and therapist. In the initial phase (sessions 1 to 2) the therapist asks the patient to record in the diary the circumstances surrounding the episodes of well-being, rated on a 0–100 scale, with 0 being absence of well-being and 100 the most intense well-being that could be experienced. Then the patient is encouraged to identify thoughts and beliefs leading to premature interruption of well-being, and is instructed to reinterpret those thoughts viewed from an observer's standpoint (*cognitive restructuring*). The technique is aimed at changing beliefs and attitudes detrimental to well-being, stimulating personal growth, and reinforcing well-being-promoting behavior. In the final sessions, the therapist can use these reinterpretations to increase a sense of well being in any of the 6 areas which might be impaired. WBT includes:

- *cognitive restructuring*: change from negative to positive any thoughts which interrupt periods of feeling well;
- scheduling of *pleasant activities*: negotiate with patients enjoyable activities they will carry out each day, e.g., go for a walk, listen to music;
- *graded tasks*: e.g., to improve positive relations, encourage a patient to phone a friend, invite that friend out for dinner, spend further time with that friend, etc.;
- *assertiveness training*;
- *problem solving* to improve patients' autonomy and environmental mastery, e.g., help patient deal with everyday activities; ask for a promotion at work etc.; and
- increasing optimism and positive thinking.

WBT shares techniques and therapeutic ingredients similar to those of standard cognitive-behavioral therapy. It thus may be conceptualized as a specific strategy within the broad spectrum of self-therapies. However, the main point of distinction of WBT is the focus: It is not the abatement of distress (as in cognitive-behavioral therapy), but the enhancement of psychological well-being and the promotion of optimal human functioning.



## Further Applications of WBT

WBT could play an important role in *preventive interventions*, for example with children or adolescents. Improving their levels of psychological well-being could be crucial in the development of their personality and could provide protection against future adversity and against health-risk behavior (e.g., smoking, alcohol or drug abuse, etc.). In a recent study WBT has been modified into a psychoeducational program performed in school with students. The results of this intervention showed that WBT was effective in improving psychological well-being and in decreasing distress.

WBT could play an important role in *psychosomatic medicine*, where increasing psychological well-being may counteract the feelings of demoralization and loss which are part of chronic disease and thus improve the individual coping.

WBT could also have an important role for the treatment of severe psychological disturbances such as obsessive-compulsive disorder (OCD) and posttraumatic stress disorder (PTSD). Clinical observation suggests that anxiety-provoking thoughts (typical of OCD) may often be preceded by feelings of well-being, suggesting that these patients may have a low threshold for well-being-related anxiety. Case reports show the potential of WBT in the treatment of OCD. Another case report documents the suitability of WBT in the treatment of PTSD, without using debriefing or other ways of dealing with the central traumatic event.

Further lines of research in the next few years could disclose new applications of WBT under the positive psychology umbrella. Engendering the positive and not just alleviating the negative may lead to more enduring results in treatment of mood and anxiety disorders.

SEE ALSO: ► Positive psychotherapy ► Positive therapy  
► Quality of life therapy ► Well-being

## Werner, Emmy

Janice E. Jones

*Cardinal Stritch University*

Emmy E. Werner (1929–) is a developmental psychologist whose research has focused on *resilience*, which she defined as a person's ability to recover from a traumatic event(s) and go on to live a happy, healthy life. She is currently professor emeritus at the University of California at Davis. She received her PhD in 1955 from the University of Nebraska. Dr Werner's groundbreaking longitudinal study examined the lives of Hawaiians born on the island of Kauai in 1955. The research revealed that people can bounce back or be resilient if they had the following components: a healthy body; emotional support; psychological stability; and intelligence. In

this longitudinal study Dr Werner followed the participants, who were the entire birth cohort, all of the people born on this island in one year. Her study was very important in that it was one of the first longitudinal studies that examined such a large group of people. Her most significant finding was that many of the children she followed from birth through to adulthood exhibited signs of resilience despite having had significant challenges throughout their life. Dr Werner identified a number of protective factors in the lives of these people who exhibited resilience which helped them cope when faced with stressful events and helped them balance the many risk factors they faced. These participants exhibited signs of resilience and the use of protective factors at critical periods in their life and throughout their development.

Dr Werner has won numerous awards for her work including the Recipient of the Society of Human Development Award for Distinguished Career Contributions to the Scientific Study of Life Span Development in 2005 along with being the Recipient of Distinguished Scientific Contributions to Child Development Award from the Society of Research in Child Development in 1999. In addition Dr Werner has won awards from both Harvard University and Radcliffe College as they recognized the importance of her landmark study of the children on Kauai. Dr Werner's work today includes the study of risk and resilience across the lifespan and studying children in historical context.

SEE ALSO: ► Resilience ► Social support

## Wisdom

Robert J. Sternberg  
*Yale University*

Different approaches have been taken to understanding wisdom. Wisdom has been called by different names, including, in addition to wisdom, “good work,” and working for the “common good.” There are three major approaches to understanding the nature of wisdom: philosophical, implicit-theoretical, and explicit-theoretical approaches. They largely have in common three attributes. First, they regard wisdom as a melding of cognitive, affective, and motivational aspects of the individual's functioning. Second, they emphasize the use of skills for some kind of positive common good. Third, they view wisdom as occurring in thought and deed, not only in thought. Wisdom is at least as much about what one does as it is about what one thinks or feels. Wisdom is a critical construct in positive psychology because it is, in the end, the use of one's repertoire of skills and dispositions for a positive common good.

## Philosophical Approaches

Philosophical approaches have been reviewed by Robinson, who noted that the study of wisdom has a history that long predates psychological study, with the Platonic dialogues offering the first intensive Western analysis of the concept of wisdom. Robinson pointed out that, in these dialogues, there are three different senses of wisdom: wisdom as: a) *sophia*, which is found in those who seek a contemplative life in search of truth; b) *phronesis*, which is the kind of practical wisdom shown by statesmen and legislators; and c) *episteme*, which is found in those who understand things from a scientific point of view.

Aristotle distinguished between two kinds of wisdom: *phronesis*, the kind of practical wisdom mentioned above, and *theoretikes*, or theoretical knowledge devoted to truth. Robinson noted that, according to Aristotle, a wise individual knows more than the material, efficient, or formal causes behind events. This individual also knows the final cause, or that for the sake of which the other kinds of causes apply.

Other philosophical conceptions of wisdom have followed up on the early Greek approaches. For example, an early Christian view emphasized the importance of a life lived in pursuit of divine and absolute truth. To this day, most religions aim for wisdom through an understanding not just of the material world, but also of the spiritual world and its relationship to the material world. Not all religions search for absolute truth, however. In some matters, it is not clear any such truth exists.

## Implicit-Theoretical Approaches

Implicit-theoretical approaches to wisdom have in common the search for an understanding of people's folk conceptions of what wisdom is. Thus, the goal is not to provide a "psychologically true" account of wisdom, but rather an account that is true with respect to people's beliefs, whether these beliefs are right or wrong. Implicit theories have been comprehensively reviewed by Bluck and Glück.

Holliday and Chandler used an implicit-theories approach to understanding wisdom. Approximately 500 participants were studied across a series of experiments. The investigators were interested in determining whether the concept of wisdom could be understood as a prototype, or central concept. Principal-components analysis of one of their studies revealed five underlying factors: exceptional understanding; judgment and communication skills; general competence; interpersonal skills; and social unobtrusiveness.

Sternberg has reported a series of studies investigating implicit theories of wisdom. In one study, 200 professors each of art, business, philosophy, and physics were asked to rate how characteristic were the behaviors obtained in a prestudy from the corresponding population with respect to the professors' ideal conception of each of an ideally wise, intelligent, or creative individual in their occupation.

Laypersons were also asked to provide these ratings but for a hypothetical ideal individual without regard to occupation. Correlations were computed across the three ratings. In each group except philosophy, the highest correlation was between wisdom and intelligence; in philosophy, the highest correlation was between intelligence and creativity. The correlations between wisdom and intelligence ratings ranged from .42 to .78 with a median of .68. For all groups, the lowest correlation was between wisdom and creativity. Correlations between wisdom and creativity ratings ranged from  $-.24$  to .48 with a median of .27. The only negative correlation ( $-.24$ ) was for ratings of professors of business.

In a second study, 40 college students were asked to sort three sets of 40 behaviors each into as many or as few piles as they wished. The 40 behaviors in each set were the top-rated wisdom, intelligence, and creativity behaviors from the previous study. The sortings then each were subjected to nonmetric multidimensional scaling. For wisdom, six components emerged: *reasoning ability*; *sagacity*; *learning from ideas and environment*; *judgment*; *expeditious use of information*; and *perspicacity*.

Examples of behaviors showing high loadings under each of these six components were “has the unique ability to look at a problem or situation and solve it,” “has good problem-solving ability,” and “has a logical mind” for reasoning ability; “displays concern for others,” “considers advice,” and “understands people through dealing with a variety of people” for sagacity; “attaches importance to ideas,” “is perceptive,” and “learns from other people’s mistakes” for learning from ideas and environment; “acts within own physical and intellectual limitations,” “is sensible,” and “has good judgment at all times” for judgment; “is experienced,” “seeks out information, especially details,” “has age, maturity, or long experience” for expeditious use of information; and “has intuition,” “can offer solutions that are on the side of right and truth,” “is able to see through things – read between the lines” for perspicacity.

In this same study, components for intelligence were: *practical problem-solving ability*; *verbal ability*; *intellectual balance and integration*; *goal orientation and attainment*; *contextual intelligence*; and *fluid thought*. Components for creativity were: *non-entrenchment*; *integration and intellectuality*; *aesthetic taste and imagination*; *decisional skill and flexibility*; *perspicacity*; *drive for accomplishment and recognition*; *inquisitiveness*; and *intuition*.

In a third study, 50 adults were asked to rate descriptions of hypothetical individuals for intelligence, creativity, and wisdom. Correlations were computed between pairs of ratings of the hypothetical individuals’ levels of the three traits. Correlations between the ratings were .94 for wisdom and intelligence, .62 for wisdom and creativity, and .69 for intelligence and creativity, again suggesting that wisdom and intelligence are highly correlated in people’s implicit theories.

Yang studied wisdom among 616 Taiwanese Chinese people. She found four factors of wisdom: competencies and knowledge; benevolence and compassion; openness and profundity; and modesty and unobtrusiveness. Similar factors were obtained by Takayama in a study of implicit theories of wisdom among Japanese

men and women of widely varying ages. The four factors that emerged were knowledge and education, understanding and judgment, sociability and interpersonal relationships, and an introspective attitude.

Takahashi and Bordia compared implicit theories of wisdom in Australian, Indian, and Japanese participants. They found identical factors for American and Australian groups. For them, the adjective *wise* was semantically most similar to *experienced* and *knowledgeable*. It was least similar to *discreet*. The ideal self, among this group, was characterized as knowledgeable and wise. In contrast, being aged and discreet were seen as quite undesirable. The Indian and Japanese adults, in contrast, viewed *wise* as semantically closest to *discreet*, followed by *aged* and *experienced*. The Japanese saw being wise and discreet as most desirable, and being knowledgeable was seen as much less desirable. In all four cultural groups, being wise was seen as extremely desirable, but being aged was seen as being extremely undesirable. So none of the groups of young people wanted to be old!

Montgomery, Barber, and McKee asked six older people to characterize wisdom in their lives. Six attributes emerged from their study. These attributes were giving guidance, having knowledge, having experience, having moral principles, and engaging in compassionate relationships. In a related study, Sowarka found that narratives of wise people emphasized their ability to solve problems through the use of novel and efficacious strategies.

## Explicit-Theoretical Approaches

Explicit theories are constructions of (supposedly) expert theorists and researchers rather than of laypeople. In the study of wisdom, most explicit-theoretical approaches are based on constructs from the psychology of human development.

Some scholars define wisdom in ways that suggest it is a property of increasing maturity. Birren and Fisher, for example, defined wisdom as “the integration of the affective, motivational, and cognitive aspects of human abilities in response to life’s tasks and problems” (1990, p. 326). This definition reflects not only psychological approaches to wisdom, but historical approaches as well. Wisdom is a balance between the opposing valences of intense emotion and detachment, action and inaction, and knowledge and doubts. *It tends to increase with experience and therefore age but is not exclusively found in old age* (Birren & Fisher, 1990). In many views, some degree of age is, at best, a necessary but not sufficient condition for the development of wisdom.

Taranto offered another view of wisdom, based on a thorough review of the literature. She defined wisdom as the recognition and response of the individual to human limitation. A related view is that of McKee and Barber, who defined wisdom as seeing through illusion. Brugman defined it as expertise in uncertainty. On this view, wisdom involves cognitive, affective, and behavioral components.

Brugman believes that wisdom goes hand in hand with increasing doubt and uncertainty regarding the comprehensibility of reality.

Ardelt has proposed a somewhat more complex view. She has defined wisdom as involving three components: the cognitive ability to see truth or reality as it actually is; reflectivity, in becoming aware of and transcending one's subjectivity and projections; and empathy and compassion for others. Kant, in the *Critique of Pure Reason*, took a different view, stating that people could not see truth or reality as it actually is, but only as it is filtered by their senses.

The most extensive program of research has been that conducted by the late Paul Baltes and his colleagues. For example, Baltes and Smith gave adult participants life-management problems, such as "A fourteen-year-old girl is pregnant. What should she, what should one, consider and do?" and "A fifteen-year-old girl wants to marry soon. What should she, what should one, consider and do?" Baltes and Smith tested a five-component model on participants' protocols in answering these and other questions, based on a notion of wisdom as expert knowledge about fundamental life matters or of wisdom as good judgment and advice in important but uncertain matters of life. Wisdom is reflected in these five components: *rich factual knowledge* (general and specific knowledge about the conditions of life and its variations); *rich procedural knowledge* (general and specific knowledge about strategies of judgment and advice concerning matters of life); *lifespan contextualism* (knowledge about the contexts of life and their temporal [developmental] relationships); *relativism* (knowledge about differences in values, goals, and priorities); and *uncertainty* (knowledge about the relative indeterminacy and unpredictability of life and ways to manage).

Three kinds of factors – general person factors, expertise-specific factors, and facilitative experiential contexts – are proposed to facilitate wise judgments. These factors are used in life planning, life management, and life review. An expert answer should reflect more of these components, whereas a novice answer should reflect fewer of them. The data collected to date generally have been supportive of the model.

Over time, Baltes and his colleagues collected a wide range of data showing the empirical utility of the proposed theoretical and measurement approaches to wisdom. For example, Staudinger, Lopez and Baltes found that measures of intelligence and personality as well as their interface overlap with but are non-identical to measures of wisdom in terms of constructs measured. Staudinger, Smith, and Baltes showed that human-services professionals outperformed a control group on wisdom-related tasks. In a further set of studies, Staudinger and Baltes found that performance settings that were ecologically relevant to the lives of their participants and that provided for actual or "virtual" interaction of minds increased wisdom-related performance substantially.

Sternberg also proposed an explicit theory, suggesting that the development of wisdom can be traced to six antecedent components: 1) knowledge, including an understanding of its presuppositions and meaning as well as its limitations; 2) processes, including an understanding of what problems should be solved

automatically and what problems should not be so solved; 3) a judicial thinking style, characterized by the desire to judge and evaluate things in an in-depth way; 4) personality, including tolerance of ambiguity and of the role of obstacles in life; 5) motivation, especially the motivation to understand what is known and what it means; and 6) environmental context, involving an appreciation of the contextual factors in the environment that lead to various kinds of thoughts and actions.

Whereas that theory specified a set of *antecedents* of wisdom, the balance theory proposed by Sternberg specified the *processes* (balancing of interests and of responses to environmental contexts) in relation to the *goal* of wisdom (achievement of a common good). This theory is incorporated into the balance theory as specifying antecedent sources of developmental and individual differences, as discussed later.

According to the balance theory, wisdom is the application of intelligence, creativity, and knowledge as mediated by values toward the achievement of a common good through a balance among intrapersonal, interpersonal, and extrapersonal interests, over the short and long terms, in order to achieve a balance among adaptation to existing environments, shaping of existing environments, and selection of new environments.

What kinds of considerations might be included under each of the three kinds of interests? Intrapersonal interests might include the desire to enhance one's popularity or prestige, to make more money, to learn more, to increase one's spiritual well-being, to increase one's power, and so forth. Interpersonal interests might be quite similar, except as they apply to other people rather than oneself. Extrapersonal interests might include contributing to the welfare of one's school, helping one's community, contributing to the well-being of one's country, or serving God, and so forth. Different people balance these interests in different ways. At one extreme, a malevolent dictator might emphasize his or her own personal power and wealth; at the other extreme, a saint might emphasize only serving others and God.

What constitutes appropriate balancing of interests, an appropriate response to the environment, and even the common good, all hinge on values. Values, therefore, are an integral part of wise thinking. The question arises as to "whose values?" Although different major religions and other widely accepted systems of values may differ in details, they seem to have in common certain universal values, such as respect for human life, honesty, sincerity, fairness, and enabling people to fulfill their potential. Of course, not every government or society has subscribed to such values. Hitler's Germany and Stalin's Russia blatantly did not, and most societies today only subscribe to them in some degree but not fully.

On this view, people may be smart but not wise. People who are smart but not wise exhibit one or more of the following fallacies in thinking: *egocentrism* – thinking that the whole world revolves around them; *omniscience* – thinking they know everything; *omnipotence* – thinking they can do whatever they want; *invulnerability* – thinking they can get away with anything; and *unrealistic optimism*.

Some theorists have viewed wisdom in terms of post-formal-operational thinking, thereby viewing wisdom as extending beyond the Piagetian stages of intelligence. Wisdom thus might be a stage of thought beyond Piagetian formal operations. For example, some authors have argued that wise individuals are those who can think reflectively or dialectically, in the latter case with the individuals' realizing that truth is not always absolute but rather evolves in an historical context of theses, antitheses, and syntheses. Consider a very brief review of some specific dialectical approaches.

Kitchener and Brenner suggested that wisdom requires a synthesis of knowledge from opposing points of view. Similarly, Labouvie-Vief has emphasized the importance of a smooth and balanced dialogue between logical forms of processing and more subjective forms of processing. Pascual-Leone has argued for the importance of the dialectical integration of all aspects of a person's affect, cognition, conation (motivation), and life experience. Similarly, Orwoll and Perlmutter have emphasized the importance to wisdom of an integration of cognition with affect. Kramer has suggested the importance of the integration of relativistic and dialectical modes of thinking, affect, and reflection. And Birren and Fisher, putting together a number of views of wisdom, have suggested as well the importance of the integration of cognitive, motivational, and affective aspects of human abilities.

Other theorists have suggested the importance of knowing the limits of one's own extant knowledge and of then trying to go beyond it. For example, Meacham has suggested that an important aspect of wisdom is an awareness of one's own fallibility and the knowledge of what one does and does not know. Kitchener and Brenner have also emphasized the importance of knowing the limitations of one's own knowledge. Arlin has linked wisdom to problem finding, the first step of which is the recognition that how one currently defines a problem may be inadequate. Arlin views problem finding as a possible stage of post-formal operational thinking. Such a view is not necessarily inconsistent with the view of dialectical thinking as such a post-formal-operational stage. Dialectical thinking and problem finding could represent distinct post-formal-operational stages, or two manifestations of the same post-formal-operational stage.

Although most developmental approaches to wisdom are ontogenetic, Csikszentmihalyi and Rathunde have taken a phylogenetic or evolutionary approach, arguing that constructs such as wisdom must have been selected for over time, at least in a cultural sense. In other words, wise ideas should survive better over time than unwise ideas in a culture. The theorists define wisdom as having three basic dimensions of meaning: that of a cognitive process, or a particular way of obtaining and processing information; that of a virtue, or socially valued pattern of behavior; and that of a good, or a personally desirable state or condition.

Future research is needed especially on how we can teach children to think wisely and how theories of wisdom can be applied in important everyday life decisions, at the personal as well as the professional level. Many leaders are knowledgeable and even intelligent, but not wise. Schools might take greater responsibility for



ensuring the leaders they prepare will be in a position to make decisions that reflect not only immediate concerns, but the long-term common good.

SEE ALSO: ► Character strengths (VIA) ► Civic responsibility and virtues  
► Moral judgment ► Strengths perspective (positive psychology) ► Virtues

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## Wrzesniewski, Amy

Paul Rozin<sup>a</sup> and Jane Dutton<sup>b</sup>

<sup>a</sup>*University of Pennsylvania*; <sup>b</sup>*University of Michigan*

Amy Wrzesniewski is a great exemplar of positive psychology. Amy was part of the first generation in her family to get a college degree. She is now an associate professor at Yale University and is one of the leading figures in the study of work from a positive psychology perspective. She has contributed to our understanding of how work, the major waking activity of human beings, can be a meaningful and positive experience.

Amy began psychological research with Paul Rozin in her sophomore year of college. This led to a three-year collaboration that generated five different published papers, on four different topics. Amy showed an incredible aptitude to study productive topics, and to mobilize the world to assist in her research. Her crowning achievement as an undergraduate was her honors thesis, on a topic that she formulated to reflect her already deep interest in the nature of work. The thesis was sponsored by three faculty members (Clark McCauley, Barry Schwartz, and Rozin), and was a major advance in understanding work: It demonstrated that individuals' conceptions of their own work (their work orientations) could be easily classified into one of jobs, careers, and callings. It also showed that even in the same jobs, done within the same organizations, work could be framed as a job, career, or calling by different individuals. This important finding became the launching pad for what is likely to become a distinguished career in the study of work.

Her dissertation work, conducted at the University of Michigan in Organizational Psychology, tested how individuals' work orientations affect how unemployed workers search for jobs and how these search behaviors affect their rates of reemployment. Her findings demonstrated that work orientation shapes both the reemployment goals and outcomes found during a period of unemployment

in different ways; while job-oriented job seekers look to replace an income stream, the career-oriented aim to advance in their standing in the new job, while the calling-oriented seek to find meaningful work above all else. Her dissertation is part of a high-impact stream of work on how individuals construct meaning at work. Her unique focus has been on individuals as active crafters of their jobs and the results that follow. She has studied hospital cleaners and how they craft their work as a calling and, in the process, provide competent caring for patients and patients' families. Amy has also helped researchers understand the interpersonal bases of work meaning. She has developed a model of work meaning that is based on a process of interpersonal sensemaking. With this work she is effectively tying together ideas of interactional dynamics, sensemaking, meaning and identity. She is bringing this work to life in several empirical studies of new job incumbents, telecommuters and hospital cleaners. Amy has been a major bridge-builder between positive psychology and the more organizationally-focused positive organizational scholarship. As a pioneer and bridge-builder, her work will have lasting impact on how positive psychology builds new insights into the difference that work makes in peoples' lives.

SEE ALSO: ► Calling ► Career development ► Employee engagement  
► Job satisfaction ► Positive organizational behavior  
► Positive organizational scholarship

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